

**MINISTRY OF ROAD TRANSPORT AND HIGHWAYS  
NATIONAL HIGHWAY AND INFRASTRUCTURE  
DEVELOPMENT CORPORATION**

**PREPARATORY STUDY FOR NORTH EAST ROAD NETWORK  
CONNECTIVITY IMPROVEMENT PROJECT (PHASE-2)**

**RESETTLEMENT ACTION PLAN**

**February 2018**

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)**

**PADECO CO. LTD.**

**NIPPON ENGINEERING CONSULTANTS CO., LTD.**

**PREPARED BY:**

**ENVIRO INFRA SOLUTIONS PVT. LTD**

**301, 302, & 305, SHREE RAM BUSINESS CENTRE, PLOT NO.  
INS-12, SECTOR-9, VASUNDHARA, GHAZIABAD – 201012**



## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>vii</b>
<b>CHAPTER 1 Introduction.....</b>	<b>1</b>
1.1 Background.....	1
1.1 Project Background.....	1
1.2 Project Proponent.....	1
1.3 Description of the Project .....	1
1.4 Necessity of the RAP .....	3
1.5 Project Component and Area .....	3
1.6 Scope of Work.....	3
1.7 Minimization of Resettlement.....	4
<b>CHAPTER 2 Policy and Legal Framework .....</b>	<b>6</b>
2.1 Legal Framework for Land Acquisition and Resettlement .....	6
2.1.1 Acts / Policies / Notifications for Land Acquisition and Resettlement.....	6
2.1.2 Main Laws and Provisions Applicable for the Project.....	7
2.1.3 Applicable Acts and Guidelines .....	10
2.1.4 Key Gap between Indian Acts and JICA Guidelines Applied to This Project ...	11
<b>CHAPTER 3 Baseline Data of the Project Area .....</b>	<b>17</b>
3.1 Socio-economic Environment.....	17
3.1.1 Assam State.....	17
3.1.2 Meghalaya State.....	21
<b>CHAPTER 4 Survey Result of the Project Area.....</b>	<b>24</b>
4.1 Methodology .....	24
4.2 Census Survey.....	25
4.3 Asset and Land Survey .....	28
4.4 Livelihood Survey.....	31
<b>CHAPTER 5 Stakeholders Consultation .....</b>	<b>34</b>
5.1 1 <sup>st</sup> Round Consultation.....	34
5.2 Community Meeting .....	35
5.3 Focus Group Discussion .....	38
5.4 2 <sup>nd</sup> Round Consultation .....	39
<b>CHAPTER 6 Resettlement and Rehabilitation Policy .....</b>	<b>44</b>
6.1 Cut-off-date.....	44
6.2 Eligibility .....	44
6.3 Compensation Policy .....	44
6.4 Income Restoration Program .....	45
<b>CHAPTER 7 Grievance Redress Mechanism.....</b>	<b>49</b>

<b>CHAPTER 8 Institutional arrangement .....</b>	<b>51</b>
<b>CHAPTER 9 Resettlement Schedule .....</b>	<b>53</b>
9.1 Preparation phase .....	53
9.2 Implementation phase .....	53
9.3 Monitoring phase .....	53
<b>CHAPTER 10 Resettlement Budget .....</b>	<b>56</b>
<b>CHAPTER 11 Monitoring and Evaluation .....</b>	<b>58</b>
11.1 Internal Monitoring .....	58
11.2 External Monitoring .....	59
11.3 Stakeholder Consultation .....	60
<b>ANNEX 61</b>	
Annex 1: TOR for RAP Implementation Agency .....	61
Annex 2: TOR for External Monitoring Agency .....	65

## Figures

<b>Figure 1-1: Photos of Affected Area</b> .....	2
Figure 1-2: Change of Starting Point of Dhubri-Phulbari Bridge Approach Road .....	5
Figure 3-1: Map of Assam State .....	17
Figure 3-2: Map of West Garo Hills District.....	21
Figure 5-1: Starting location mentioned in the meeting.....	37
Figure 5-2: Ending location mentioned in the meeting.....	37
Figure 5-3: Stakeholders/Community Meetings .....	42
Figure 7-1: Grievance Redress Mechanism.....	50
Figure 8-1: Institutional Arrangements for RAP Implementation.....	52
<b>Figure 8-2: Support Arrangement for RAP Implementation</b> .....	52

## Tables

Table 1-1: Project Component and Area .....	3
Table 1-2: Alternatives of Initial Design.....	4
Table 2-1: Acts / Policies / Notifications & Their Relevance to the Project .....	6
Table 2-2: Land Acquisition Procedure in Assam.....	10
Table 2-3: Land Acquisition Procedure in Meghalaya.....	11
Table 2-4: Key Gap between JICA and Indian Regulations.....	12
Table 3-1: Demographics of Assam State and Districts in the Project Site .....	18
Table 3-2: Scheduled Caste and Scheduled Tribe in Assam State .....	18
Table 3-3: Economic Trend in Assam State .....	19
Table 3-4: Workers Ratio in Assam State.....	19
Table 3-5: Demographics of Char Area in Dhubri / South Salmara-Mankachar district .....	20
Table 3-6: Demographic Situation of Meghalaya State .....	22
Table 3-7: Population Ratio of Scheduled Caste and Scheduled Tribes .....	22
Table 3-8: Economic Trend of Meghalaya State.....	22
Table 3-9: Workers Composition in Meghalaya State.....	23
Table 4-1: List of Surveyed Villages and Land Pieces.....	24
Table 4-2: Summary of the Survey .....	25
Table 4-3: Number of PAH and PAP.....	25
Table 4-4: Village wise PAHs and PAPs .....	26
Table 4-5: Movement of Location .....	26
Table 4-6: Socio-Demographic profile.....	27
Table 4-7: Composition of Affected Households.....	27
Table 4-8: Religious Composition .....	27
Table 4-9: Classification of Titleholders and Non-titleholders .....	28
Table 4-10: Land ownership status of PAHs.....	28
Table 4-11: Legal status of PAHs of each construction section .....	29
Table 4-11: Loss of Land by Usage and Number of PAH/PAPs .....	29
Table 4-12: Loss of Land by District and Usage.....	29
Table 4-13: Severeness of Land Impact.....	29
Table 4-14: Loss of Private Structures in the Project.....	30
Table 4-15: Type of Affected Private Structures .....	30
Table 4-16: Affected Trees .....	30
Table 4-17: Crops Cultivated by PAHs .....	31
Table 4-18: Education Level of PAPs .....	32
Table 4-19: Literacy Rate of PAPs.....	32
Table 4-20: Occupation.....	32
Table 4-21: Total Monthly Household Income (Rs/Month).....	33
Table 4-22: Vulnerability .....	33

Table 5-1: Location and Dates of Stakeholder meetings .....	34
Table 5-2: Discussion in Stakeholder Meetings.....	34
Table 5-3: Location and Dates of Community meeting .....	35
Table 5-4: Discussion in Community meetings .....	36
Table 5-5: Location and Dates of Focus Group Discussions .....	38
Table 5-6: Topics in Focus Group Discussions .....	38
Table 5-7: Details of the Second Round Consultation Meetings .....	40
Table 5-8: Participation Details of the Second Round Consultations .....	40
Table 6-1: Entitlement Matrix .....	47
Table 8-1: Implementation Institute and Their Roles.....	51
Table 9-1: Resettlement Schedule.....	54
Table 10-1: R&R Budget .....	56
Table 11-1: Internal Monitoring Form .....	58
Table 11-2: External Monitoring Form .....	59

## **List of Abbreviations and Acronyms**

ADC	Autonomous District Council
DC	Deputy Commissioner
EA	Executing Agency
GHG	Green House Gas
GRC	Grievance Redressal Committee
GRM	Grievance Redressal Mechanism
LAO	Land Acquisition Officer
KVK	Krishi Vigyan Kendras
MIG	Meghalaya Institute of Governance
NOC	No Objection Certificate
NGO	Non-Governmental Organization
PAH	Project Affected Household
PAP	Project Affected People
PIU	Project Implementation Unit
PWD	Provincial Works Department
RAP	Resettlement Action Plan
ROW	Right of Way
SC	Scheduled Caste
SIA	Social Impact Assessment
SHM	Stakeholder Meeting
ST	Scheduled Tribe
STD	Sexually Transmitted Disease

## **EXECUTIVE SUMMARY**

### **1. Project Background**

Ministry of Road Transport and Highways (MORT&H) has decided to construct Two / Four lane bridge including approaches over River Brahmaputra between Dhubri on North Bank via newly formed South Salmara-Mankachar district villages, and Phulbari on South Bank in the state of Assam/Meghalaya on NH-127B (Length: 20 km) on EPC Mode under JICA. Construction of Two lane/Four Lane Bridge including approaches over River Brahmaputra strengthening of National Highways. The work would be taken up for in order to have a better facility in a long continuous stretch. The Dhubri – Phulbari section of NH- 127B road is in the state of Assam/Meghalaya. The total length of this section is about 20 km.

### **2. Policy and Legal Framework**

The legal framework and principles adopted for addressing resettlement issues in the project have been guided by the existing legislation and policies of the Government of India (GOI), the State Government of Assam and Meghalaya. Assam State follows National Highway Act 1956 for land acquisition and Assam LARR Rules 2015 as well as LARR Act 2013 for compensation procedures. Meghalaya State follows LARR Act 2013 for the land acquisition as well as compensation procedures. Prior to the preparation of the Resettlement Action Plan (RAP), a detailed analysis of the existing national and state policies was undertaken and the section below provides details of the various national and state level legislations studied and their applicability for the project. This RP is prepared based on the review and analysis of all applicable legal and policy frameworks of the country and World Bank/JICA policy requirements.

### **3. Baseline Data of the Project Area**

Dhubri district has a population of 1,949,258 persons and population density is 896 persons per sq km significantly higher than the state average (398 persons per sq km). South Salmara-Mankachar is also highly populated district with 528,952 people and 977 persons per sq.km. Over 80% of the population in both districts are Muslims and area is primarily dependent on agriculture and fishing owing to the river Brahmaputra flows through the district. The literacy rates are low in both district, 58.34% in Dhubri and 40.0% in South Salmara-Mankachar against 72.19% of the state average.

West Garo Hills district has population density of 175 persons per sq.km and majority of population (61%) belongs to Christian community and high rate of scheduled tribes (73.7%). Phulbari village, on the other hand, has only 1.3% of schedule tribe (1.3%). The economy of West Garo Hills district is basically agrarian in nature with about 80 percent of the population dependent on agriculture and people also practice dairy farming. The literacy rate is lower (67.58%) than the state average (74.43%).

### **4. Survey Result of the Project Area**

The affected area is a part of Dhubri on North bank, South Salmara-Mankachar, the Char areas (sandbar) in the Brahmaputra River in Assam State and also Phulbari on South bank of Brahmaputra River in Meghalaya State. Total affected households (PAHs) will be 761 majority of which belong to Muslim religion. Out of 761 PAHs, there are 45 women headed households. Majority of them are illiterate and almost all the PAHs are dependent on agriculture, fishing and unskilled labour and that is the major livelihood source. Very few are running small business like grocery etc.

There will be likely impact on residential structures, commercial structures, agricultural land both irrigated and non-irrigated. Some of the identified likely PAHs will lose residential structures as



well as agricultural land. Most of likely PAHs have their residential structure along with their agricultural land within bank of Brahmaputra in Assam and Jinjiram rivers in Phulbari town.

**Table: Summary of Project Impacts**

<b>Sl. No.</b>	<b>Impacts</b>	<b>Number</b>
1	Total Area of Land required (in Hectares)	94.3
2	Area of private land to be acquired (in Hectares)	56.2
3	Total number of PAHs	761
4	Total number of PAPs	3,043
5	Total number of private structures affected	273
6	Total number of physically displaced households	127
7	Total number of physically displaced persons	500

## **5. Stakeholders Consultation**

All the affected people will be fully informed and closely consulted on resettlement and compensation options. Participation of affected people in planning and managing resettlement will reduce their fears and will give them an opportunity in key decisions that will affect their lives. It is also essential to identify stakeholders who have direct interest in project development and who will be involved in consultative process. This report elaborates the situation specific participation mechanisms. During SIA, two stakeholder meeting, four community meeting and two focus group discussion were arranged in affected area.

## **6. Resettlement and Rehabilitation Policy**

Relocation will be considered for all the directly likely affected people by construction of Two/Four lane bridges including approaches over river Brahmaputra between Dhubri on north bank and Phulbari on south bank in the state of Assam/Meghalaya. Due to land acquisition and design of the bridge, it is not possible for the existing residential and commercial structures to stay at the same location. In this case resettlement of existing residential structures within ROW involving physical relocation of all the residential structures likely affected by the project will follow following components:

- Site selection or approval to selected site
- Relocation schedule and assistance
- Replacement of services and enterprises
- Restoration of livelihood
- Special assistance for vulnerable groups

The project will have three types of PAPs as follows. The involuntary resettlement requirements apply to all three types of displaced persons and the RP describes provision for all type of PAPs and accordingly formulated the entitlement matrix.

- (i) persons with formal legal rights to land lost in its entirety or in part;
- (ii) persons who lost the land they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws; and
- (iii) persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land.

## **7. Grievance Redress Mechanisms**

In the project RP implementation there is a need for an efficient grievance redress mechanism that will assist the PAPs in resolving their queries and complaints. Therefore, formation of Grievance Redress Committee (GRC) will be most important for grievance redress and it is anticipated that most, if not all grievances, would be settled by the GRC.

## **8. Institutional Arrangements**

For implementation of RP there will be a set of institutions involve at various levels and stages of the project. For successful implementation of the RP the proposed institutional arrangement with their role and responsibility has been outlined in this section.

## **9. Resettlement Schedule**

## **10. Resettlement Budget**

The resettlement cost estimate for this project includes eligible compensation, resettlement assistance, and support cost for RP implementation. The support cost, which includes staffing requirement, monitoring and reporting, involvement of NGO in project implementation and other administrative expenses are part of the overall project cost. The unit cost for land and other assets in this budget has been derived through field survey, consultation with affected families, relevant local authorities, and reference from old practices. Contingency provisions have also been made to take into account variations from this estimate. Based on the survey, the resettlement budget comes out to be Rs. 57,31,82,000.

# CHAPTER 1 Introduction

## 1.1 Background

### 1.1 Project Background

Ministry of Road Transport and Highways (MORT&H), has decided to construct Two / Four lane bridge including approaches over River Brahmaputra between Dhubri on North Bank via newly formed South Salmara-Mankachar district villages, and Phulbari on South Bank in the state of Assam/Meghalaya (Length: 20 km) on EPC Mode under JICA. Construction of Two lane/Four Lane Bridge including approaches over River Brahmaputra strengthening of National Highways. The work would be taken up for in order to have a better facility in a long continuous stretch. The Dhubri – Phulbari section of NH- 127B road is in the state of Assam/Meghalaya. The total length of this section is about 20 km.

### 1.2 Project Proponent

The project proponent is Ministry of Road Transport and Highways (MORT&H) / National Highways and Infrastructure Development Corporation (NHIDCL) having its headquarters address at Parivahan Bhavan, 1, Parliament Street, New Delhi entrusted AECOM Asia Company Limited having its registered office at 9/F, Infinity Tower C,DLF Cyber city, DLF Phase 2, Gurgaon, Haryana for the preparation of EIA, SIA & RAP for proposed of Two / Four lane bridge including approaches over River Brahmaputra between Dhubri on North Bank and Phulbari on South Bank in the state of Assam/Meghalaya on NH-127B (Length: 20km).

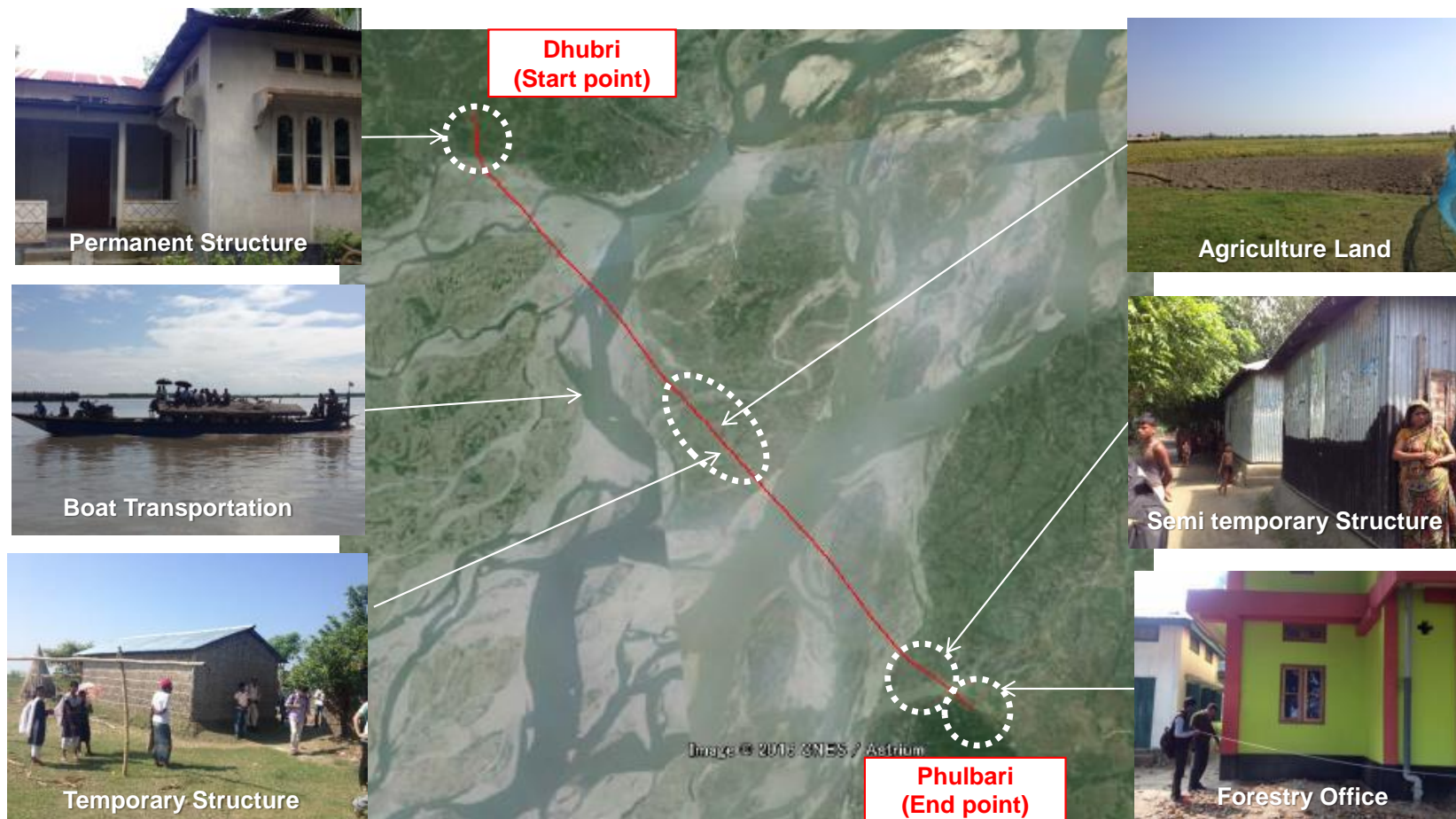
### 1.3 Description of the Project

The proposed project is the construction of Two/Four lane bridges including approaches over River Brahmaputra between Dhubri on North Bank via and Phulbari on South Bank in the state of Assam/Meghalaya on NH-127B (Length: 20km) on EPC Mode under JICA.

The proposed project is transverse at 89°58'16.99"E & 26°1'34.63"N at Dhubri on North Bank and Phulbari on South bank transverse at 90°1'49.99"E & 25°52'12.03"N at an Elevation of 35 to 42 m above Sea level.

The climate along the proposed project is subtropical humid climate. The average annual rainfall in Dhubri District is 2,363 mm and 3,300 mm in West Garo District. The variation in the rainfall from year to year is not large. The climate of the district is largely controlled by South West monsoon activates from May and continues up to September-October with about 65% rainfall occurring during the monsoon. The monthly evapo-transpiration is about 40% of the rainfall, the highest in August and lowest in January. July/August is the hottest month when the maximum temperature is about 30°C. December/January is the coldest month, as the mean daily minimum temperature is recorded at 10 °C.

The likely affected area is predominantly agricultural land and settlements scatter along the proposed alignment. Photos of Affected Area are given in **Figure 1-1** below.



**Figure 1-1: Photos of Affected Area**

## 1.4 Necessity of the RAP

The project is a 19,282km bridge with approach road that stretches over the Bramaphtra River from the Dhubri and South Salmara-Manchakar District in Assam State, to the West Garo Hills District in Meghalaya State. The proposed alignment of this bridge will be a part of newly designated highway (NH-127B) connecting Dhubri to Phulbari. This NH-127B will continue on to connect Srirampur in Assam state and Nongstoin in Meghalaya state. The bridge will have four lanes. According to Indian standard and specification (IRC:SP:84-2014), the ROW for four lane highway is set as 60m as shown below. Thus, ROW for this project is planned as 60m.

IRC:SP:84-2014	A minimum Right of Way of 60m should be available for development of 4-lane highway. The authority would acquire the additional land required, if any.
----------------	--

This ROW along the bridge and approach road passes 18 villages in total. There are title holding and non-title holding land owners who will be affected by the land acquisition and will require involuntary resettlement. In this survey, a Resettlement Action Plan (RAP) was prepared with the assistance from district land acquisition officers and village chiefs of the target area, and the district autonomous council in the West Garo Hills in accordance with Indian laws and regulations, as well as the JICA Guideline.

## 1.5 Project Component and Area

The project component and area encompassing the land acquisition and resettlement will be the entire alignment of bridges, including approaches over the Brahmaputra between Dhubri and Phulbari. The Project affected area is the whole stretch of the bridge under 60m ROW which includes land and structures, such as residential and common properties.

**Table 1-1: Project Component and Area**

Length	19.282km
ROW	60 m (four lane)
Affected Areas	18 villages (Dhubri-13, South Salmara-Mankachar-4, West Garo Hills-1)

Source: JICA Study Team

Land use and land acquisition required during the construction work will be under the responsibility of contractors. The identification and selection of the land will be carried out with the assistance from respective DCs and in consultation with local residents. The land will be leased out or acquired at market rates. Land that is leased shall be returned in the same condition it was before the use. Those conditions will be included in the contract agreement between the contractors. The actual process should be included in the resettlement monitoring plan.

## 1.6 Scope of Work

### (1) Legal Framework Related to the Project

The legal framework and principles adopted for the project have been guided by the existing legislation and policies of the Government of India (GOI), the State Government of Assam and Meghalaya. Since the project is considering getting assistance from JICA, the regulatory/legal framework should be consistent with the national, state, local, as well as JICA Guidelines for Environmental and Social Considerations.

## (2) Scope of Resettlement

This project extends to two states, the Assam and Meghalaya states, across the Brahmaputra River. The Char lands (sand bars) in the Brahmaputra River which belong to the Assam state will also be within the scope of land acquisition and resettlement. The Char lands are unique in that the shapes change according to the changes in water level. The area of the Char lands becomes smaller due to a rise in water level during the rainy season (May to October) and expands in dry season (November to April). In this survey, a census survey was carried out based on the list of villages and land plots prepared by the district governments from the land acquisition map produced by DPR consultant (prepared in June 2016). A Resettlement Action Plan (RAP) will be prepared in accordance with relevant Indian laws and regulations, World Bank’s safeguard policy and JICA guidelines.

### 1.7 Minimization of Resettlement

#### (1) Alternatives of Initial Design

Alternatives to minimize the resettlement at the initial design stage are described in section 7.4. the following table shows social components, including land acquisition and resettlement considered in the alternative analysis. The affected structures were estimated from the site survey. Option 1, the alignment selected in DPR, is the option with minimum number of affected structures, impact on agricultural/ Char land, and area necessary for the land acquisition. The following three options were analysed in section “7.4.3 Result of the Analysis of Alternatives”.

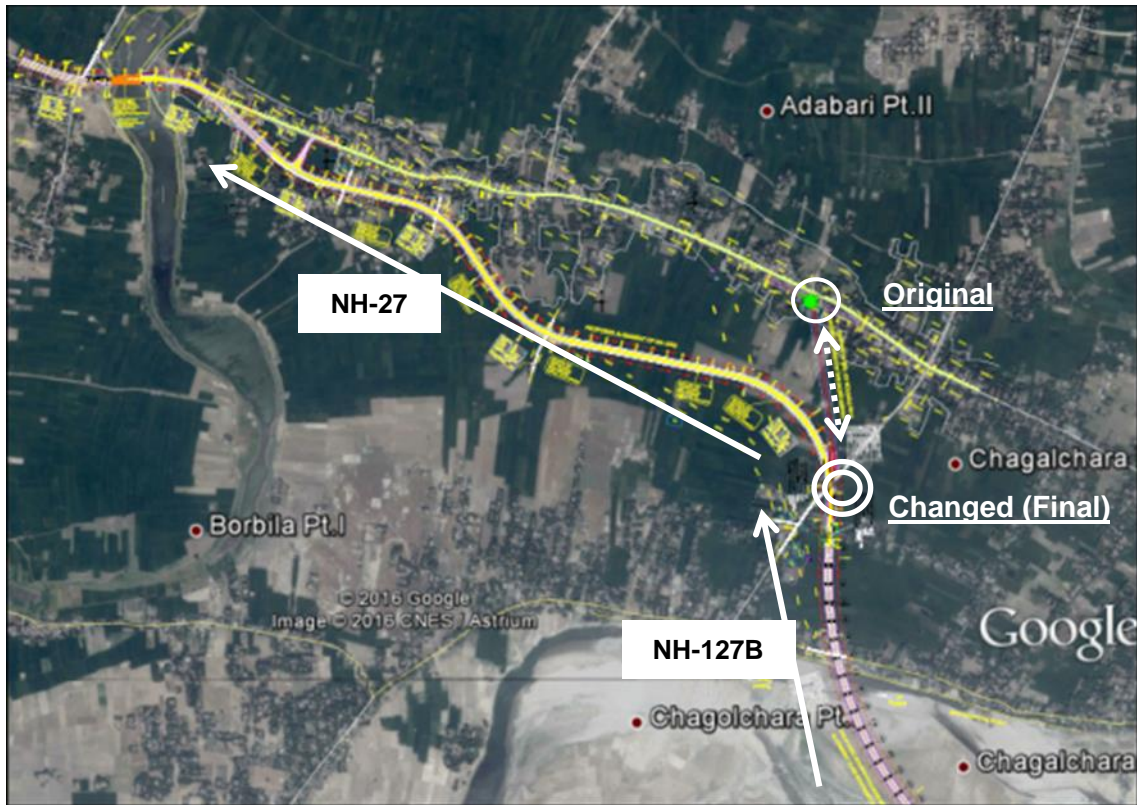
**Table 1-2: Alternatives of Initial Design**

	Option 1 (DPR, recommended)	Option 2	Option 3
Structures affected (no.)	122	170	187
Agricultural land affected (km)	2.00	2.95	5.86
Built up area affected (km)	0.90	0.85	1.00
Char land affected (km)	6.30	6.70	5.10
Land to be acquired (ha)	55.20	63.00	71.76

Source: JICA Study Team based on Inception Report, July 2015 prepared by AECOM

#### (2) Method for Minimizing Resettlement

The original alignment was planned to connect to the existing road where residential structures are concentrated. However, in order to minimize the scale of resettlement, the connection point was changed to connect to another road upgrading project NH-27 (old NH31C); connecting to Srirampur, which is now in preparation by the Public Works Department of Assam State. The alignment was modified to bypass existing roads, and the starting point (connection point) of the bridge at Dhubri District was shifted about 300m south as indicated in Figure 7-24. Due to this shift, a number of physically displaced households were reduced and the displacement of 1 school facility was avoided.



Source: JICA Study Team

**Figure 1-2: Change of Starting Point of Dhubri-Phulbari Bridge Approach Road**

## CHAPTER 2 Policy and Legal Framework

### 2.1 Legal Framework for Land Acquisition and Resettlement

#### 2.1.1 Acts / Policies / Notifications for Land Acquisition and Resettlement

The development projects are mandated to be consistent with the existing acts and policies of the respective national, state, local governments, and also the guidelines and policies of JICA. An outline of the various acts and policies that are in place in the country are as follows:

**Table 2-1: Acts / Policies / Notifications & Their Relevance to the Project**

No	Acts and Policies	Relevance to the project
1	The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013	This Act came into force on 1 January, 2014, and extends to the whole of India except the state of Jammu and Kashmir. The provisions of this Act relating to land acquisition, compensation, rehabilitation and resettlement, shall apply when the appropriate government acquires land for its own use, hold and control, including for public sector undertakings and for public purposes.
2	The Assam Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015	This Rule came into force on 31 July, 2015, and extends to the whole state of Assam. This Rule is based on the basic provision of the LARR Act (2013), and detailed descriptions covering requirement of consent, condition of compensations, etc. are provided.
3	National Highway Act 1956	It extends countrywide. If the Central Government deems any land required for the building, maintenance, management or operation of a national highway; the intension to acquire such land will be declared by notification in the official Gazette.
4	Meghalaya Transfer of Land (Regulation) Act, 1971.	It extends to the tribal areas within the state of Meghalaya. Providing the government of Meghalaya may prohibit any transfer of land by notifications issued by the competent authority under the provision of this Act. However, this act is only applicable mainly for land transfers from government to private companies or between private individuals, and is not applicable for land acquisition by public sectors.
5	Right to Information Act 2005	Provided for the citizens to have access to information under the control of public authorities, in order to promote transparency and accountability in every public authority.
6	World Bank OP 4.12 – Involuntary Resettlement	Provided that all affected lands or structures under the project, irrespective of valid certificates or legal documents, shall be supported under the project to improve their quality of life, or at least restore to pre-project standards.
7	JICA Guidelines for Environmental and Social Considerations 2010	See (3) below.

Source: JICA Study Team



## **2.1.2 Main Laws and Provisions Applicable for the Project**

### **1) Right to fair compensation and Transparency in Land Acquisition, Rehabilitation, and Resettlement Act (LARR), 2013**

The LARR Act (2013) was passed by the Parliament on 5 September, 2013, and came into force on 1 January, 2014, replacing the previous Land Acquisition Act (1984). The aim and objectives of this Act are:

- To ensure, in consultation with local institutions established under the Constitution, a humane, participative, informed and transparent process for land acquisition.
- To provide just and fair compensation to the families whose land has been acquired, or affected by such acquisition.
- To make adequate provisions for such affected persons, and their rehabilitation and resettlement.
- To ensure that the outcome of acquisition should be that affected persons become partners in development leading to an improvement in their post-acquisition social and economic status, and for matters connected therewith or incidental thereto.

At the beginning of the enforcement of the LARR Act (2013), the National Highway Act 1956 was included in the 13 enactments under Fourth Schedule, which exempted the application of the LARR Act (2013). However, under Order from Ministry of Road Development dated 28 August, 2015, named as “Removal of Difficulties” extended the provisions of compensation and rehabilitation & resettlement to the Fourth Schedule. The LARR Act 2013 provision will apply when:

- Government acquires land for its own use, hold and control for strategic purposes and infrastructure development
- Government acquires land with the ultimate purpose to transfer it for use of private companies for stated public purpose (including PPP projects, but excluding state or national highway projects)
- Government acquires land for immediate and declared use by private companies for public purpose

In Meghalaya, this Act was challenged on grounds that the State falls under the Sixth Schedule of the Constitution, since Land in the State belongs to individuals and not the Government. Nevertheless, the provisions of this Act relating to land acquisition, compensation, rehabilitation and resettlement, shall apply when the appropriate Government acquires land for its own use, hold and control, including for public sector undertakings, and for public purposes.

### **2) The Assam Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015**

The Assam Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015 (Assam LARR Rules 2015) has been in effect since 31 July, 2015. This Rule extends to the whole state of Assam. LARR 2013 allows states to set detailed procedures and specifications based on the Act. Basic provisions of LARR 2013 applies to Assam LARR 2015, and detailed descriptions are provided including the following sections.

- Requirement of consent from the affected persons
- Update of government’s land records before the acquisition
- Details in compensation amount (multiplier, etc.)

### **3) National Highway Act 1956 by Ministry of Shipping, Transport and Highways**

The National Highway Act (1956) extends to the whole of India where the central government deems for public purpose that land is required for the building, maintenance, management or operation of a national highway. The definition of highway includes the following.

- All lands appurtenant thereto, whether demarcated or not
- All bridges, culverts, tunnels, causeways, carriageways and other structures constructed on or across such highways
- All fences, trees, posts and boundary, furlong and milestones of such highways or any land appurtenant to such highways

The act provides the process of land acquisition for highway projects. The local government appointed by the central government will be the implementation agency for land acquisition. The amount of compensation will be calculated at market value based on the tax record of land transaction owned by the concerned agency. The final decision will be made upon confirmation from the land owner, and subsequent compensation and land acquisition will follow.

### **4) Right to Information Act 2005**

The basic objective of the Right to Information Act is to empower the citizens, promote transparency and accountability in the workings of the Government. The Right to Information Act (2005) mandates timely response to citizen requests for government information. It was enacted on 15 June, 2005, and came into force on 12 October, 2005. The Act extends to the whole of India except Jammu and Kashmir, and is non-applicable to Intelligence and Security organizations.

### **5) World Bank Safeguard Policy OP 4.12 Involuntary Resettlement**

The overall objectives of the Bank's policy on involuntary resettlement are that it should be avoided where feasible, or minimized, exploring all viable alternative project designs. When resettlement is not avoidable, the project should assist displaced persons to improve their livelihoods and standards of living, or at least to restore them to the prior state. It also states that displaced persons should be consulted and should have opportunities to participate in planning and implementing resettlement programs.

Definition of displaced persons in this policy is categorized as followings (including those who have no legal rights).

- Those who have formal legal rights to land (including customary and traditional rights recognized under the laws of the country);
- Those who do not have formal legal rights to land at the time the census begins, but have a claim to such land or assets, provided that such claims are recognized under the laws of the country or become recognized through a process identified in the resettlement plan;
- Those who have no recognizable legal right or claim to the land they are occupying.

This policy covers direct economic and social impacts from the projects such as (i) relocation or loss of shelter; (ii) loss of assets or access to assets; or (iii) loss of income sources or means of livelihood, irregardless if the affected persons must move to another location.

### **6) JICA Guidelines for Environmental and Social Considerations**

The key principles of JICA policies on involuntary resettlement are summarized below.

- I. Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives.
- II. When population displacement is unavoidable, effective measures to minimize the impact and to compensate for losses should be taken.
- III. People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels.
- IV. Compensation must be based on the full replacement cost as much as possible.
- V. Compensation and other kinds of assistance must be provided prior to displacement.
- VI. For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. It is desirable that the resettlement action plan includes elements laid out in the World Bank Safeguard Policy, OP 4.12, Annex A.
- VII. In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people.
- VIII. Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans.
- IX. Appropriate and accessible grievance mechanisms must be established for the affected people and their communities.

The above principles are complemented by World Bank OP 4.12. Since it is stated in the JICA Guideline that “JICA confirms that projects do not deviate significantly from the World Bank’s Safeguard Policies”. Additional key principles based on World Bank OP 4.12 is as follows.

- X. Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers or others who wish to take advantage of such benefits.
- XI. Eligibility of Benefits include, the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who do not have formal legal rights to land at the time of census but have a claim to such land or assets, and the PAPs who have no recognizable legal right to the land they are occupying.
- XII. Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based.
- XIII. Provide support for the transition period between displacement and livelihood restoration.
- XIV. Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc.

In addition to the above core principles in the JICA policy, it also laid emphasis on a detailed resettlement policy inclusive of all the above points; project specific resettlement plan; institutional framework for implementation; monitoring and evaluation mechanism; time schedule for implementation; and, detailed financial plan etc.

## 2.1.3 Applicable Acts and Guidelines

### 1) Assam State

According to the DCs of Dhubri District and South Salmara-Mankachar District of Assam State, the land acquisition process will follow the National Highway Act (1956). The compensation and resettlement procedures, including the calculation of the R&R budget, as well as the consideration of livelihood restoration programme will follow Assam LARR Rules (2015), which is based on LARR Act (2013).

The main gaps between NH Act 1956 and Assam LARR Rule 2015 in the land acquisition process are as follows.

- Implementation of SIA by the agency appointed by the district government. In practice, DRP consultants prepare SIA/RAP report together with DPR, which is in line with an international donor agency in the case of a donor funded project.
- Public consultation duration is 21 days, which is shorter than the Assam LARR 2015/LARR 2013 of 60 days.

The land acquisition procedure for this project will be as follows. The status as of 4 July, 2017, was at the draft 3A Notification stage.

**Table 2-2: Land Acquisition Procedure in Assam**

Procedures	Responsible Agencies
Submission of requisition for land acquisition	Project proponent
Notification of affected area (3A) (target village and land area)	District government (DC)
Hearing of objections	District government (Land acquisition officer)
Census survey for valuation	District government (Land acquisition officer)
Compensation budget calculation	District government (DC)
Preparation of R&R Scheme	District government (Land acquisition officer)
Notification of compensation (3D) (affected people, compensation amount)	District government (DC)
Hearing of objections	District government (DC)
Declaration of final award	District government (DC)
Payment of full amount of compensation	Project proponent to affected families through State and District government
Land transfer	District government (DC)
Displacement of affected families	District government (DC)

Source: JICA Study Team

### 2) Meghalaya State

In the West Garo Hills District of Meghalaya State, according to the DC, the LARR Act 2013 will be applied in the process of land acquisition, compensation and resettlement. However, since Meghalaya state falls under the Sixth Schedule of the Constitution, the land belongs to communities and not the government. Therefore, an additional step in the process is required to obtain a NOC (No Objection Certificate) from the district autonomous council, which is essentially the approval of the project itself before the land acquisition process.

The process for land acquisition in this project will be as follows. As of 4 July, 2017, the NOC was already obtained and undergoing SIA notification.

**Table 2-3: Land Acquisition Procedure in Meghalaya**

<b>Procedures</b>	<b>Responsible Agencies</b>
Submission of requisition for land acquisition	Project proponent
No objection certificate (NOC)	West Garo Hills Autonomous Council
SIA notification	District government (DC)
SIA implementation	Assigned agency (MIG)
SIA appraisal	Assigned experts group (District level)
Preliminary notification	State government
Hearing objections	District government (DC)
Compensation budget calculation	District government (DC)
Preparation of R&R Scheme	District government (DC)
Hearing of objections	District government (DC)
Declaration of final award	District government (DC)
Payment of full amount of compensation	Project proponent to affected families through State and District government
Land transfer	District government (DC) / State government
Displacement of affected families	District government (DC)

Source: JICA Study Team

#### **2.1.4 Key Gap between Indian Acts and JICA Guidelines Applied to This Project**

Table 7-68 summarizes the key differences between JICA guideline and Indian LARR Act 2013, Assam LARR Rules 2015 and NH Act 1956 relevant to this project. The recommendations for measures to fill the gaps, and policy applied for this project are also given in the table.

**Table 2-4: Key Gap between JICA and Indian Regulations**

SL. No.	JICA Guidelines (2010)	India LARR 2013/ Assam LARR 2015	India NH Act 1956	Gaps Identified	Proposed Gap Filling Measures
1	Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives. (JICA GL)	The government shall ensure minimum displacement of people, disturbance to the infrastructure, ecology and minimum adverse impact on the individuals affected. (Ch.2)	No specific provision	LARR: N/A NH: Yes	Conduct alternative analysis
2	When population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken. (JICA GL)	When the government intends to acquire land for public purposes, it shall consult with the people concerned and carry out a Social Impact Assessment (SIA). (Ch.2)	No specific provision	LARR: N/A NH: Yes	Include an appropriate compensation and livelihood restoration policy to RAP
3	People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost, must be sufficiently compensated and supported so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels. (JICA GL)	RAP will be prepared based on the census survey (including compensation and livelihood restoration assistance. (Ch.4, The 2 <sup>nd</sup> Schedule)	Amount of compensation shall be determined with consideration on the damages caused by the loss of the land, change of residence, earnings, etc. (3G)	LARR: No NH: No provision for the livelihood restoration assistance	Same as above
4	Compensation must be based on the full replacement cost as much as possible. (JICA GL) Valuation and compensation for losses shall be determined by the replacement cost. (WB OP4.12 Para 10)	Amount of compensation shall be determined by the competent authority based on the market value of the land (2x the market price in urban areas and up to 4x in rural	Amount of compensation shall be determined by the competent authority based on the market value of the land (3G)	LARR: Replacement cost for land will be 2-4 times of the market price which satisfies WB guideline (land price, cost for land preparation). Likewise,	Amount of compensation shall be determined based on the replacement cost identified through market value survey.

SL. No.	JICA Guidelines (2010)	India LARR 2013/ Assam LARR 2015	India NH Act 1956	Gaps Identified	Proposed Gap Filling Measures
		areas). Building shall also be based on the market value. Stamp duty and other fees payable for registration of the land or house will borne by the government. (Ch.4,8, The 1 <sup>st</sup> Schedule)		replacement cost for structure will be 2 times of the market price which also satisfies WB guideline (materials, transportation of materials, cost of labour and transfer tax) However, depreciation of the asset will be considered. NH: The amount determined by the competent authority may be lower than the actual market price.	Also, the calculation of the replacement cost should not take into account the depreciation of the assets.
5	Compensation and other kinds of assistance must be provided prior to displacement. (JICA GL)	The Collector shall take possession of land after ensuring that full payment of compensation, rehabilitation and resettlement are paid to entitled persons (Ch.5)	The amount of compensation shall be deposited by the government before taking possession of the land. (3H)	LARR: No NH: No	N/A
6	For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. (JICA GL)	SIA report and SIA management plan will be prepared by the concerned government, and made available to local institutions in local languages (Ch.2)	Concerned government shall have newspapers publish information of the land to be acquired. (3A,3G)	LARR: No NH: No	N/A
7	In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them	The government shall give adequate publicity of date and venue of the public hearing, and results of discussions shall be indicated	Public hearings will be conducted in two stages, intention of land acquisition and the information of land owner	LARR: No NH: Possibility of insufficient information disclosure	Need consideration for information disclosure. Stakeholder consultation shall be conducted with the participation of

SL. No.	JICA Guidelines (2010)	India LARR 2013/ Assam LARR 2015	India NH Act 1956	Gaps Identified	Proposed Gap Filling Measures
	in advance. (JICA GL)	in the SIA. SIA shall be made available to local institutions. (Ch.2)	list and compensation amount (3A, 3C,3G)		residents, and the result shall be incorporated in the project.
8	When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people. (JICA GL)	Same as above	Same as above	LARR: No NH: Possibility of insufficient information disclosure	Same as above
9	Appropriate participation of affected people must be promoted in the planning, implementation, and monitoring of resettlement action plans. (JICA GL)	Monitoring committee in the central and provincial level shall be established. Experts in the concerned field can be employed to implement the monitoring (Ch.7)	No specific provision	LARR: No NH: Yes	Establish an appropriate monitoring system to ensure participation of the community
10	Appropriate and accessible grievance mechanisms must be established for the affected people and their communities. (JICA GL)	An objection hearing will be conducted within 60 days from the date of the notification indicating the information of the land to be acquired (Ch.4)	Public hearing will be conducted after the information of land owner list and compensation amount are made available (3C,3G)	LARR: Yes NH: Yes	Establishment of grievance redress mechanism shall be mentioned in the RAP and district gov't shall be responsible for its implementation.
11	Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey, preferably at the project identification stage, to prevent a subsequent influx of encroachers who wish to take advance of such benefits. (WB OP4.12 Para.6)	Affected households, land and property will be identified through site investigation (Ch.2)	Affected households, land and property will be identified through site investigation (3B)	LARR: No NH: No	N/A
12	Eligibility of benefits includes; the PAPs who have formal legal rights	Title holders include those who have the legal rights and	Land users shall receive 10% of the amount	LARR: Non-titleholders need to be residing	Recognize claims of non-titleholders



SL. No.	JICA Guidelines (2010)	India LARR 2013/ Assam LARR 2015	India NH Act 1956	Gaps Identified	Proposed Gap Filling Measures
	to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets, and the PAPs who have no recognizable legal right to the land they are occupying. (WB OP4.12 Para.15)	those who do not have legal rights but whose primary source of livelihood for three years prior to the acquisition of the land. (Ch.1)	determined by the competent authority (3G)	continuously or drawing livelihood from the affected area for a period of not less than 3 years. NH: Non-titleholders are not entitled for compensation	(irrespective of their residing period status).
13	Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. (WB OP4.12 Para.11)	In case of an irrigation project, land-based resettlement will be considered. SC/ST shall be provided land equivalent to the land acquired (The 2 <sup>nd</sup> Schedule)	No specific provision	LARR: No NH: Yes	If land compensation is requested, advise will be provided to the district collector to give priority for possible land compensation.
14	Provide support for the transition period (between displacement and livelihood restoration). (WB OP4.12 Para.6)	The government shall provide the choice of 1) suitable training for the jobs created through the project, 2) a one-time payment per affected family, 3) certain amount of monthly payment for 20 years (The 2 <sup>nd</sup> Schedule)	Amount of compensation shall be determined with consideration of the damages caused by the loss of the land, change of residence, earnings, etc.(3G)	LARR: No NH: No provision for the livelihood restoration assistance	Livelihood restoration programme shall be included in the RAP.
15	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc. (WB	Additional assistances to vulnerable groups, SC/ST are mentioned in the provision (Ch.5, The 2nd Schedule)	No specific provision	LARR: No NH: Yes	Vulnerable groups, SC/ST shall be identified during the census survey and special assistance shall be included in the RAP.

<b>SL. No.</b>	<b>JICA Guidelines (2010)</b>	<b>India LARR 2013/ Assam LARR 2015</b>	<b>India NH Act 1956</b>	<b>Gaps Identified</b>	<b>Proposed Gap Filling Measures</b>
	OP4.12 Para.8)				

Source: JICA study team

## CHAPTER 3 Baseline Data of the Project Area

### 3.1 Socio-economic Environment

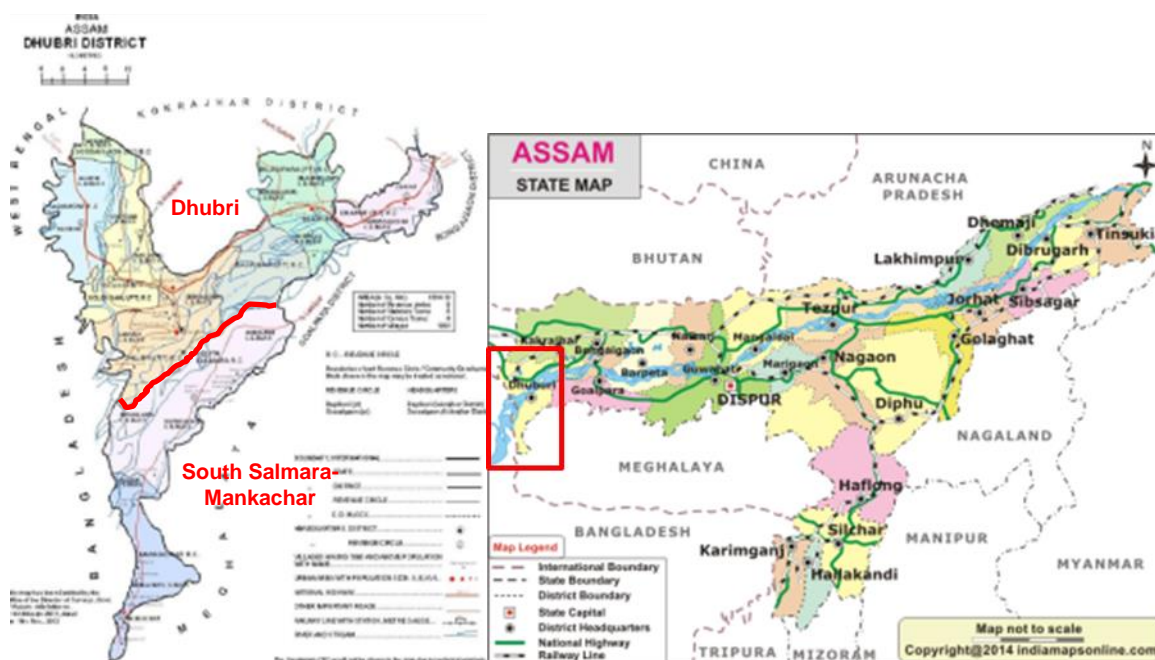
This project is located in the Dhubri District and South Salmara-Mankachar District of Assam State and the West Garo Hills District in Meghalaya State. The western end of the bridge is at Dhubri and it goes across the Brahmaputra River and ends at Phulbari in the north of West Garo Hills. There are Char lands formed in the Brahmaputra River by the sand/silt from the upper stream. This Char land also belongs to the Dhubri and South Salmara-Mankachar Districts.

#### 3.1.1 Assam State

##### 1) Administrative Division

Assam State is located in the northeastern part of India and is bounded on the north by Bhutan and the west by Bangladesh. The Dhubri and South Salmara-Mankachar Districts are situated in the extreme western corner of Assam State. Administratively, the Dhubri District has two subdivisions namely Dhubri and Bilasipara along with eight revenue circles and seven tehsils. The South Salmara-Mankachar District is a newly formed district carved out from the Dhubri District in 2015 and officially became an administrative district in February 2016. It was formerly a subdivision of the Dhubri District. The South Salmara-Mankachar District has 2 revenue circles and 2 tehsils.

The distance from Dhubri town to the capital of Assam State, Dispur is approximately 290km. The distance between Hasingmari town, the capital of South Salmara-Mankachar District located across the Brahmaputra River, and Dispur is approximately 245km by the route through Meghalaya State.



Source: JICA Study Team

Figure 3-1: Map of Assam State

##### 2) Demographic Situation

The total area of the Dhubri District is 2,176km<sup>2</sup> with the population of 1,949,258. The population density is 896 persons/km<sup>2</sup>, which is more than double compared to the Assam State average (398

people/km<sup>2</sup>). The population growth during 2001-2010 is 24.4% which is much higher than the Assam State average (17.1%). The literacy rate of the Dhubri District is 58.3% which shows quite a lower rate than that of the state average (72.2%).

The South Salmara-Mankachar District covers 568km<sup>2</sup>, holding a population of 555,114. Out of which, rural population consists of around 95%. The population density of the district is 869 persons/km<sup>2</sup>, which is similar to the Dhubri District. The literacy rate is 39.9%, which is significantly low compared to the state average as mentioned above.

The following Table shows the demographic data of Assam State and two districts in the project sites.

**Table 3-1: Demographics of Assam State and Districts in the Project Site**

Item	Assam State	Dhubri District	South Salmara-Mankachar District
Area (km <sup>2</sup> )	78,438	2,176	568
Population (no.)	31,205,576	1,949,258	555,114
Male-female ratio (no.) (1,000 men)	958	953	—
Population density (ppl/km <sup>2</sup> )	398	896	869
Population growth rate (2001-2010)	17.1%	24.4%	—
Urban population	14.1%	10.5%	4.7%
Literacy rate	72.2%	58.3%	39.9%

Source: Census 2011

### 3) Ethnic Group and Religion

Assam State is home to the Assamese, Bodo and Ahom people. The official languages used in Assam State are Assamese and Bodo. Other than that, Bengali is also used in the project area which is similar to Assamese. The following Table shows the population ratio of the Scheduled Caste (SC)<sup>1</sup> and Scheduled Tribe (ST)<sup>2</sup>. The ratio is lower in the Dhubri District and South Salmara-Mankachar District compared to the Assam state average. Based on the survey, it is confirmed that minority groups, including the Bodo tribes<sup>3</sup>, are not included in the project affected households.

**Table 3-2: Scheduled Caste and Scheduled Tribe in Assam State**

Item	India average	Assam State	Dhubri District	South Salmara-Mankachar District
SC population	16.2%	7.2%	3.6%	1.4%
ST population	8.2%	12.5%	0.3%	1.8%

Source: Census 2011

<sup>1</sup> Scheduled Caste (SC) refers to the group of people formerly known as Dalit (the lowest class in Hindu society) designated by the Indian Constitution.

<sup>2</sup> Scheduled Tribe (ST) is a group of tribes designated by the Indian Constitution who has a distinctive culture, are geographically isolated and are socio-economically lagging.

<sup>3</sup> For a reference, the Bodo tribe is one of the tribes designated in the sixth schedule in India having its roots in Tibeto-burman languages and call themselves "Bodosa". A majority of the Bodo tribe are Hindu. The Bodo tribe continued armed conflict for their political independence, and Bodoland Autonomous Council was established in western Assam in 1993, and Bodoland Territorial Autonomous District was established in 2003.

The Dhubri District has a large population of Muslims. Approximately 80% of the population is Muslim and the remaining 20% is Hindu. The South Salmara-Mankachar District is also Muslim dominant, composed of 95% Muslims and 5% Hindu.

#### 4) Economy and Industry

The GSDP of Assam State in 2013-14 accounts for Rs. 885.4 billion and per capita GSDP is Rs. 50,558. The average annual growth rate during the past 10 years was approximately 6%. Industry wise ratio of GSDP in 2013-14 shows that service sector accounts for 60%, agriculture and industry sector shares 20% respectively. The shares of the agriculture and industry sectors have been decreasing over the past 10 years while the contribution of the service sector is increasing. Sector-wise annual growth rate is 3.8% for agriculture, 2.8% for the industry sector and growth of the service sector is the highest at 10.3%.

**Table 3-3: Economic Trend in Assam State**

Item	2004-05	2008-09	2013-14	Annual growth (10year average)
GSDP (Rs. in billion)	534.0	640.3	885.4	6.6%
Ratio in GSDP Agriculture (%)	25.6	23.4	21.3	3.8%
Industry (%)	27.5	25.9	21.3	2.8%
Service (%)	46.9	58.1	57.5	10.3%

Note: GSDP in Constant Price (2004-05)

Source: Planning Commission, Government of India

The composition of workers shows that majority of the workers in Assam State are engaged in agriculture related work accounts for 56.2% out of which 25.6% are the landless agriculture labours. At the project site, a majority of the population is cultivating paddies along with pulses and vegetables, in the Char land jute is also one of the major crops. In this area, animal husbandry, fishery and boat operation are also the income source for the population.

**Table 3-4: Workers Ratio in Assam State**

Item	Assam State	Dhubi District
Worker population (%)	38.4	34.4
Cultivator (%)	33.9	30.7
Agriculture worker (%)	15.4	25.6
Domestic worker (%)	4.1	4.2
Other worker (%)	46.6	39.7

Source: Directorate of Census Operations Assam, 2011

#### 5) Char Lands

One of the peculiar features of the Brahmaputra River which flows in Assam State is the presence of riverine silt islands (the Char lands). The geographical spread of the Char lands is over 14 districts of Assam State and the major part of the project area falls under these Char lands.

The landform of the Char lands changes according to the erosion and deposition of silts and sands over the years. The areas also change in size and shape due to the changes of water level in the rainy season (May to October) and dry season (November to April). The origin of the populations in the Char lands dates back to the colonial period when the British administrators induced a large number of agriculture labours from East Bengal (former Bangladesh). Due to this historical background, the majority of the population in the Char lands is Muslim.

The official surveys focused on the Char lands were carried out in 1992-93 and 2003-04. According to the survey in 2003-04<sup>4</sup>, the total population of the Char lands is 2,490,097 and the population in Dhubri and the South Salmara-Mankachar District alone (former the Dhubri District) is 689,909. The result of those surveys shows that the Char lands represents one of the most backwards areas in the state showing high population growth, high poverty level and a low literacy rate. The population of Below Poverty Line (BPL) is 69% and a literacy level is 14.6%; both of which have worsened in 10 years.

**Table 3-5: Demographics of Char Area in Dhubri / South Salmara-Mankachar district**

Year	Population	Population Growth	Household	BPL Household	Literacy
1992-93	233,206	—	—	54.2%	19.1%
2003-04	689,909	51.1%	109,748	69.0%	14.6%

Source: Socio-Economic Survey Report, 2003-04, Directorate of Char Areas Development, Govt. of Assam

In some areas, there are land registration records and private lands are allocated to villagers in the Char lands. However, the villagers in the Char lands are living in movable temporary structures so that they're able to shift their locations as necessary. Based on the interview survey conducted during the site visits, villagers who live on the land that will be under water during the rainy season will move their location to a neighboring area or other village in the Char land. During the dry season, some come back to the original place and others continue to stay in the shifted land.



Temporary residents in the Char Land



Erosion of the Char Land

In terms of basic amenities in the villages of the Char lands, hand pumps are introduced in some areas and some areas are sourcing the drinking water from the river. In a majority of the areas, electricity and sewage systems are unavailable. Lower primary and middle schools are established in the villages, however for higher education, the children must go to nearby towns. Medical sub-centres were provided in some areas, however, there are only visiting doctors available. The infrastructures and facilities are very much limited in those areas.

<sup>4</sup> Socio-Economic Survey Report, 2003-04, Directorate of Char Areas Development, Govt. of Assam.



Hand pump in Char land

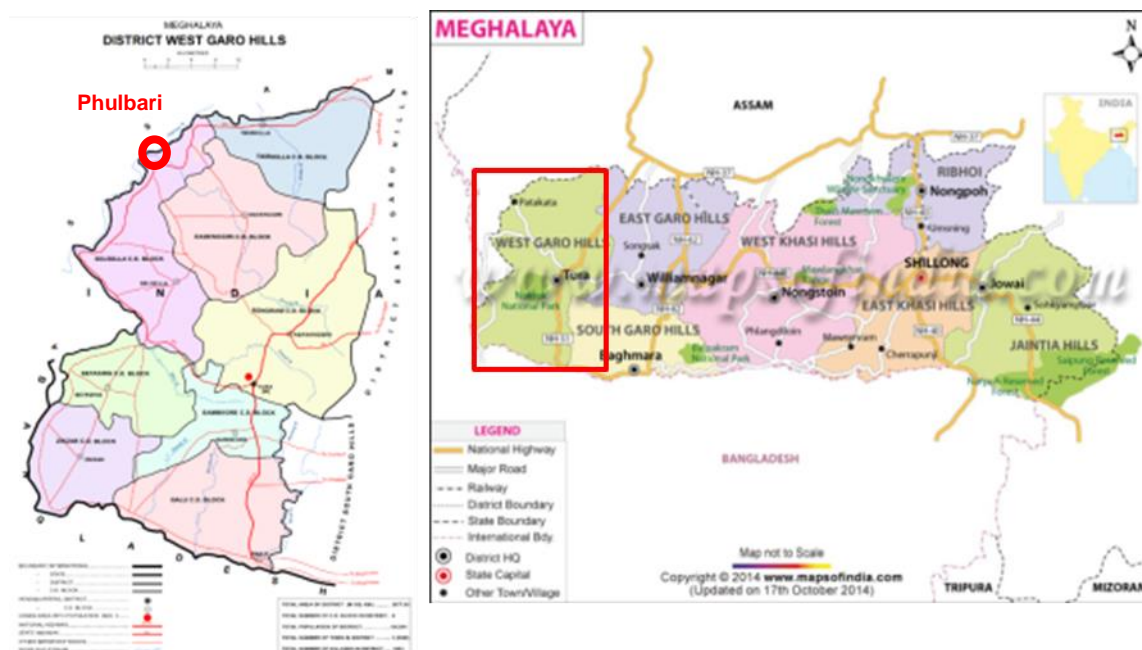


Primary School in Char land

### 3.1.2 Meghalaya State

#### 1) Administrative Division

Meghalaya State was a part of Assam State before 1970. It was founded as autonomous state in April 1970 and gained its status as an independent State in January 1972. The State shares the border with Assam State in the north and Bangladesh in the south and west. It is composed of 11 Districts. The West Garo Hills District is situated in the western corner of Meghalaya State. The state's capital, Tura, holds the second largest population in the State. The Phulbari village, at the end of the bridge, is located at the north end of the West Garo Hills District. The distance from Phulbari to Tura is approximately 80km, however, due to poor road conditions, it will take 3-4 hours to travel the distance by car.



Source: JICA Study Team

Figure 3-2: Map of West Garo Hills District

#### 2) Demographic Situation

Total area of the West Garo Hills District is 1,650km<sup>2</sup>, which is 7.4% of the total area of Meghalaya State. The district holds a population of 642,923, which is approximately 20% of the state population. The population growth rate of 2001-2010 was 26.7%, which is slightly lower than the state average (28.0%). The literacy rate of the West Garo Hills District is 67.6%, which is

lower than the state average of 74.4%. The following Table shows the demographic situation of Meghalaya State and the West Garo Hills District.

**Table 3-6: Demographic Situation of Meghalaya State**

Item	Meghalaya State	West Garo Hills District
Area (km <sup>2</sup> )	22,429	1,650
Population (no.)	2,966,889	642,923
Male-female ratio (no.) (1,000 men)	28.0%	26.7%
Population density (ppl/km <sup>2</sup> )	132	173
Population growth rate (2001-2010)	20.0%	11.6%
Urban population	74.4%	67.6%

Source: Census 2011

### 3) Ethnic Group and Religion

The main tribes in Meghalaya State are Kashi, Garo and Jaintia who reside in the hills of a different area. The official languages in the state are Kashi, Garo and English. Around the project area, Garo tribes are dominant in the hill area. However, since the end of the bridge locates at the border of Assam State and it is plain area along the Brahmaputra River, Muslims are the main residents. Therefore, the common language used in the project area is Bangali.

Meghalaya State holds large populations of Scheduled Tribe (ST) which is a common feature of the states in North Eastern India. The population of ST in Meghalaya State is 86.2% while Scheduled Caste (SC) population is 0.6%, which is significantly low compared to the Indian average. In the case of the West Garo Hills District, ST accounts for 73.7%, out of which 71.2% is the Garo tribe. However, as described above, Garos are not included in the project affected people.

**Table 3-7: Population Ratio of Scheduled Caste and Scheduled Tribes**

Item	Phulbari Village	West Garo Hills District	Meghalaya State	India (average)
SC population (%)	11.2%	1.4%	0.6%	16.2%
ST population (%)	1.3%	73.7%	86.2%	8.2%

Source: Census 2011

Owing to the propagation of Christianity under the English colonial era, majority of the population in Meghalaya State is Christians. In the West Garo Hills District, 61% is Christian, 19% is Hindu, 17% is Muslim and other religions such as Buddhist and Shikh constitute 4%.

### 4) Economy and Industry

The GSDP of Meghalaya State in the 2013-14 accounts for Rs. 65.6 billion and the annual average growth rate in the past 10 years is 10.5%. The industry wise contribution to GSDP in 2013-14 shows that the service sector accounts for 54.1%, industry sector 31.4% and agriculture sector 14.6%. The trend over 10 years demonstrates that the contribution of agriculture sector in GSDP is decreasing while the ratio of the service and industry sectors is increasing.

**Table 3-8: Economic Trend of Meghalaya State**

Item	2004-05	2008-09	2013-14	Annual growth (10-year average)
GSDP (Rs. in billion)	65.6	90.0	134.7	10.5%



Ratio in GSDP (%)	Agriculture	23.3%	18.6%	14.6%	2.9%
	Industry (%)	26.1%	30.1%	31.4%	14.6%
	Service (%)	50.6%	55.6%	54.1%	11.9%

Note: GDP in Constant Price (2004-05)

Source: Planning Commission, Government of India

The composition of the working population in the West Garo Hills District is 39.8%, which is almost the same as Meghalaya the state average. 62.8% of the workers are engaged in agriculture related work. The agriculture in the West Garo Hills District is predominantly paddy cultivation and animal rearing is the secondary occupation in the area.

**Table 3-9: Workers Composition in Meghalaya State**

Item	Meghalaya State	West Garo Hills District
Worker population (%)	40.0	39.8
Cultivator (%)	41.7	47.2
Agriculture worker (%)	16.7	15.5
Domestic worker (%)	1.7	3.0
Other worker (%)	39.8	34.3

Source: Directorate of Census Operations Meghalaya, 2011

Since the project area is located at the north western end of Meghalaya state and is distant from the major cities, transportation infrastructures are not properly maintained and economic activities in this area are limited.

## CHAPTER 4 Survey Result of the Project Area

### 4.1 Methodology

The census survey was carried out along the proposed alignment to understand the impact of land acquisition and scale of resettlement from this project. In this survey, questionnaire sheets were used to develop the profiles of Project Affected Households (PAHs) and to prepare an inventory of the affected assets including land and structures. The components of the survey include a population census, asset survey and livelihood survey, and estimate budget for compensation and assistance for rehabilitation as well as livelihood restoration. Duration and target of the census survey is as follows.

- Duration: November 2016 to February 2017
- Target: PAHs whose structure (residential, shops, etc.) and/or land (agricultural, residential, etc.) will be affected

The census survey used the list of villages and land plots under the alignment produced by land acquisition officers in Dhubri and South Salmara-Mankachar Districts based on the land acquisition map produced by DPR consultant (AECOM). The list of land plots indicates land owners, land types and land areas. Since a similar list has not been prepared for the West Garo Hills District, likely PAHs were identified via map and site observation.

Although the survey aimed to cover all the affected areas, 31.4% of the total land plots remained un-surveyed, since the owners could not be identified during the course of the survey period. In the census survey, the survey team sought assistance from village heads and villagers to inform the land owners prior to and during the survey, the owners were contacted by phone calls from relatives and neighbors.

Table 4-1 shows the list of villages, number of plots under the alignment and number of plots un-surveyed. The section marked in gray are the villages in the Char lands.

**Table 4-1: List of Surveyed Villages and Land Pieces**

District		Village	No. of Dag under alignment	No. of Dag not surveyed
Dhubri	1	Adabari Part-II	62	25
	2	Chagal chora Part-I	19	5
	3	Chagal chora Part-II	67	24
	4	Chagal chora Part-III	70	24
	5	Airanjangla Part-I	85	20
	6	Airanjangle Part-II	80	17
	7	Bhassanir char Part-I	41	14
	8	Kathiar Alga	66	14
	9*	Bauskata IV	1	-
	10*	Bauskata VI	1	-
	11	Bororawatre Part-I	9	4
	12	Bororawatre Part-II	5	2
	13	Aminerchar	13	1
South Salmara-Mankachar	14*	Basir Char	1	-
	15	Chaiter Chor Part-I	168	75
	16	Baladoba	47	6
	17*	Sebaltari	1	-

West Garo	18	Phulbari	1	0
		Total	736	231

Source: JICA study team

Note: Grey section indicates villages of Char land

Note: Villages with \* mark are government land so land plots are not allocated to individual owners.

## 4.2 Census Survey

The survey components include basic information of the PAH including composition of households, ethnicity and religion. Inventory of the loss of assets of lands, structures and other assets, livelihood survey including source of income were also surveyed.

### 1) Summary of Project Affected Households

Out of 761 PAHs, 633 PAHs (2,538 PAPs) are affected by land only, 127 PAHs (500 PAPs) are affected by structures and lands, while 1 PAH (5 PAPs) is affected by commercial structure. In addition, the Project has impact on the livelihoods of 495 PAHs: 95 agriculture labours, approximately 300 boat operators and 100 fishermen.

**Table 4-2: Summary of the Survey**

Impacts	No. of PAH		No. of PAP	
	Title holder&Non-titleholder can claim rights	Non-titleholder	Title holder&Non-titleholder can claim rights	Non-titleholder
Total PAHs	671	90	2706	337
Structure to be affected (Physically displaced)	124	3	491	9
Only land to be affected	546	87	2,210	328
Commercial structure to be affected	1	0	5	0
Loss of livelihood	495	-	-	-
Agriculture labour	95	-	-	-
Boat operator	300	-	-	-
Fishermen	100	-	-	-

Source: JICA study team

Detailed results of the census survey are described in the following sections.

### 2) Project Affected Household and Affected People

District wise PAHs and PAPs identified in this census survey are shown in Table 4-3. The total PAHs are 761 and PAPs are 3,042. The composition of PAPs in the project area is 59.2% in Dhubri, 40.6% in South Salmara-Mankachar and 0.1% in West Garo Hills. Out of the total PAPs, 54.1% are residents in the Char land.

**Table 4-3: Number of PAH and PAP**

District	PAHs	PAPs	PAPs in Char land
Dhubri	621	2,550	1,109
South Salmara	138	485	485
West Garo Hills	2	8	0
Total	761	3,042	1,858

Source: JICA study team

Village wise number of PAHs and PAPs are shown in Table 4-4.

**Table 4-4: Village wise PAHs and PAPs**

District	No.	Village	PAHs	PAPs
Dhubri	1	Adabari Part-II	46	171
	2	Chagal chora Part-I	14	60
	3	Chagal chora Part-II	63	290
	4	Chagal chora Part-III	69	279
	5	Airanjangla Part-I	17	87
	6	Airanjangle Part-II	168	701
	7	Bhassanir char Part-I	56	213
	8	Kathiar Alga	93	360
	9	Bauskata IV	58	252
	10	Bauskata VI	2	8
	11	Bororawatre Part-I	16	65
	12	Bororawatre Part-II	5	20
	13	Aminerchar	14	44
South Salmara Mankachar	14	Basir Char	0	0
	15	Chaiter Chor Part-I	63	212
	16	Baladoba	52	196
	17	Sebaltari	23	77
West Garo	18	Phulbari	2	8
		Total	761	3,043

Note: Grey lines indicate villages of Char land

Source: JICA study team

### 3) Movement of Locations

During the rainy season, due to the rise of water level, Char lands near the river will be submerged. According to the census survey, 18.7% of the total PAH (142 households) shift their location during rainy season and out of which, half resides in Dhubri and half in South Salmara-Mankachar District. Out of those who shift their locations, 26.1% (18 households) in Dhubri and 72.6% (20 households) in South Salmara-Mankachar District answered that they do not return to the original places. Mobile households are more prominent in the South Salmara-Mankachar District. In relation to the land ownership which will be described later, it was reported from DCs that those who have the ownership or land use rights (Patta) of the original land will be entitled to compensation.

**Table 4-5: Movement of Location**

District	No. of PAH	Move the location during rainy season	Come back to the same location in dry season
Dhubri	621	69	18
South Salmara	138	73	53
West Garo Hills	2	0	0
Total	761	142	71
Percentage	-	18.7%	9.3%

Note: Households who answered that they do not come back to the same location in dry season were in four villages such as; Bororawatre Part-1, Part-2, Baladoba and Chaiter Chor Part-1.

Source: JICA Study Team

#### 4) Population

The census survey identified that the majority of PAHs were male-headed households, while female-headed households were 51 (6.7%). Out of total PAPs, 69.0% are male and 31.0% are female.

**Table 4-6: Socio-Demographic profile**

PAHs			PAPs		
Male-headed	Female-headed	Total	Male	Female	Total
710	51	761	2,099	944	3,043
93.3%	6.7%	-	69.0%	31.0%	-

Source: JICA Study Team

#### 5) Composition of Households

The average family size of PAHs is 4. In Dhubri, 3 to 5 family members are the majority, and 3 to 4 are the majority in the South Salmara-Manchakar District.

**Table 4-7: Composition of Affected Households**

	1	2	3	4	5	6	7+	Total
Dhubri	13	62	145	177	131	63	30	621
South Salmara	1	15	59	45	13	3	2	138
West Garo Hills	0	0	0	2	0	0	0	2
Total	14	77	204	224	144	66	32	761
Percentage	1.8%	10.1%	26.8%	29.4%	18.9%	8.7%	4.2%	-

Source: JICA Study Team

#### 6) Social category

All PAHs identified themselves as a general caste. No scheduled castes or scheduled tribes were identified during the census survey.

#### 7) Ethnicity and Language

The ethnicity of PAHs in the survey area were mixed between Assamese and Bengali due to the historical background mentioned in 7.3.3 (5). Therefore, all the PAHs in the project area use Assamese and Bengali languages<sup>5</sup>.

#### 8) Religion

The religious breakdown of the surveyed PAHs is shown in Table 4-8. Most of the PAHs are Muslims consisting of 99.3% of the total PAH, and the other 0.7% (5 PAHs) are Hindus. No PAHs maintain special cultural and social traditions outside of the mainstream.

**Table 4-8: Religious Composition**

	Muslim	Hindu	Others
Dhubri	619	2	0
South Salmara	137	1	0
West Garo Hills	0	2	0
Total	756	5	0

<sup>5</sup> As Assamese is a language derived from Bengali, there are high similarity between both languages. In the project area, government officials mainly use Assamese language and school education is done in Assamese as well so written documents are usually in Assamese. On the other hand, daily communication and spoken languages are mostly in Bengali.

Percentage	99.3%	0.7%	-
------------	-------	------	---

Source: JICA Study Team

### 4.3 Asset and Land Survey

#### 1) Land Ownership Status of PAHs

During the census survey, it was observed that the government records do not match with the current land owners since the records have not been updated. Therefore, those having land registration are classified as (1) Title holder, those who do not have land registration but have documents showing that they have succeeded the land or they had land purchase agreements are classified as (2) Non-title holder but can claim rights. For those who reside on government land without any documents / certificates will be categorized as (3) Non-title holders and cannot confirm rights. Based on the information of land ownership provided during the interview survey, titleholders and non-titleholders in this project are classified as follows.

In this project, (1) Title holder and (2) Non-title holder but can claim rights are considered as “Legal” and (3) Non-title holder and cannot confirm rights as “Illegal”.

**Table 4-9: Classification of Titleholders and Non-titleholders**

Titleholder as per gov't record	Current Status	Classification	Entitlement
Original owner is the same as current owner	Current owner is the same as in the land record	(1) Title holder	Compensation & Assistance
Original owner is different from current owner	Current owner is son/daughter of the original owner or having purchase record but not registered	(2) Non-title holder but can claim rights	Compensation & Assistance
Government land	Current owner does not have documents and not registered	(3) Non-title holder and cannot confirm rights	Assistance

Source: JICA Study Team

Titleholders and non-titleholders were counted based on the above mentioned classification. Out of 761 respondents, 449 households are legal titleholders (59.0%), whereas 222 respondents are non-titleholders but can claim rights (29.1%). There are 90 respondents who do not have any legal right (non-title holder) and cannot claim rights (11.8%). The majority of non-title holders were identified in Char lands, 71 households (11.4%) in Dhubri and 19 households (13.8%) in South Salmara-Mankachar. Assistance for those non-titleholders shall be adequately provided by the project.

**Table 4-10: Land ownership status of PAHs**

District	Titleholder	Non-titleholder can claim rights	Non-titleholder cannot claim rights
Dhubri	365	185	71
South Salmara	82	37	19
West Garo Hills	2	0	0
Total	449	222	90
Percentage	59.0%	29.2%	11.8%

Source: JICA Study Team

Legal and illegal status of PAHs of each construction section (bridge and approach road) is as follows

**Table 4-11: Legal status of PAHs of each construction section**

Items	Title holder & Non-titleholder can claim rights	Non-titleholder
Bridge section	332	81
Access road section	339	9
Total	671	90

Source: JICA study team

## 2) Loss of Private Land

The majority of land in the project area is agricultural land. PAHs with affected agricultural land are 633 PAHs (83.2%), residential land are 102 PAHs (13.4%), both agricultural and residential land are 25 PAHs (3.3%) and only 1 household uses it for commercial purposes. A total of 127 households (16.7%) will have their structure affected and will be displaced from their original residential land. Table 4-11 presents the number of PAH/PAPs by different use of land and Table 4-12 indicates a district-wise breakdown of the land usage.

**Table 4-12: Loss of Land by Usage and Number of PAH/PAPs**

Use of Land	PAHs	PAPs	PAP (%)
Agricultural	633	2,538	83.4%
Residential	102	406	13.3%
Agricultural and Residential	25	94	3.1%
Commercial shop	1	5	0.2%
<b>Total</b>	761	3,043	-

Source: JICA Study Team

**Table 4-13: Loss of Land by District and Usage**

District	Agriculture	Residential	Agricultural & Residential	Commercial
Dhubri	527	69	24	1
South Salmara	106	31	1	0
West Garo Hills	0	2	0	0
Total	633	102	25	1
Percentage	83.2%	13.4%	3.3%	0.1%

Source: JICA Study Team

## 3) Severeness of Impact on Land Owners

The intensity of their land loss is shown in the Table 4-13. Out of 393 PAHs who responded, 46.1% are losing less than 25% of their land and 30.3% are losing more than 50% of their land. Others who were not aware of the total land area were not included in the figures.

**Table 4-14: Severeness of Land Impact**

Scale of Impact	PAHs	PAH %
Up to 10%	73	18.6%
Above 10% and Below 25%	108	27.5%

Above 25% and Below 50%	93	23.7%
Above 50% and Below 75%	58	14.8%
Above 75%	61	15.5%
<b>Total</b>	<b>393</b>	<b>-</b>

Note: Other respondents do not have information about their total area.

Source: JICA Study Team

#### 4) Loss of Structures

Due to the project, 273 structures are going to be affected and 127 PAHs and 500 PAPs will be displaced. 72.3% of structures and 71.4% of displaced PAPs are in the Dhubri District.

**Table 4-15: Loss of Private Structures in the Project**

District	No. of Structure	Displaced PAHs	Displaced PAPs	% of PAPs
Dhubri	200	93	357	71.4%
South Salmara	65	32	135	27.0%
West Garo Hills	8	2	8	1.6%
Total	273	127	500	-

Source: JICA Study Team

#### 5) Type of Affected Structures

The structures to be affected by the project are categorized as temporary, semi-permanent, and permanent structures. Out of 273 affected structures, 32 (11.7%) structures are of permanent nature, 78 (28.6%) are of semi-permanent nature and 163 (59.7%) are of temporary nature. The district-wise breakdown of the affected structures is summarized in Table 4-15.

**Table 4-16: Type of Affected Private Structures**

District	Permanent	Semi-Permanent	Temporary
Dhubri	23	55	122
South Salmara	1	23	41
West Garo Hills	8	0	0
Total	32	78	163
Percentage	11.7%	28.6%	59.7%

Source: JICA Study Team

#### 6) Loss of Common Property Resources

In terms of common property resources, one forest office in Phulbari will be affected from the project. The relocation of the office will be discussed between DC of West Garo Hills and the forest department. No other education or religious facilities will be affected.

#### 7) Loss of Trees and Crops

Along the path, a total of 2,559 trees may be impacted due to the land acquisition. Out of which 1,897 trees (74.1%) are fruit bearing trees and 662 trees (25.9%) are other trees. Major fruit bearing trees observed were bananas, jackfruits and groundnut, etc. and other trees were bamboo trees.

**Table 4-17: Affected Trees**

District	Fruit Tree	Other Trees
Dhubri	1,796	594



South Salmara	62	29
West Garo Hills	39	39
Total	1,897	662
Percentage	74.1%	25.9%

Source: JICA Study Team

Major crops cultivated in the areas were a combination of rice paddies (dominant source), pulses, jute and vegetables including tomatoes, potatoes and chili etc. During the census survey, the exact size of cultivated area and areas of each crop could not be identified. Table 4-17 shows the types of crops cultivated by the PAHs. Second and third crops, if any, were counted multiple times. PAHs in Dhubri District cultivate rice (99.6%) together with dal/lentils (74.9%), jute (40.7%) and vegetables (31.4%). In South Salmara-Mankachar District, dal/lentils (84.9%), rice (49.1%) and jute (3.8%) are cultivated. At the time of the official assessment survey by the valuation committee, the areas and types of standing crops will be assessed in detail.

**Table 4-18: Crops Cultivated by PAHs**

District	No. of PAH	Paddy	Dal/Lentils	Jute	Vegetables
Dhubri	526	99.6%	74.9%	40.7%	31.4%
South Salmara	106	49.1%	84.9%	3.8%	0.1%
West Garo Hills	0	0	0	0	0

Source: JICA Study Team

#### 8) Loss of Livelihood

Apart from those whose assets are to be affected, agriculture labourers who are employed by the land owners will also negatively impacted from the project. During the census survey, 95 agriculture labourers were identified, a majority which were in the Dhubri District. Most of them are engaged as temporary labours during sowing and harvesting seasons. These agriculture labourers will also be entitled to assistance and participation in the income restoration program.

In addition, current boat operators who are providing the services between Dhubri and Phulbari will also be affected by the project. According to the Inland Waterway Transportation (IWT), 20 passenger boats and 30-50 goods transportation boats per day are in direct operation between Dhubri and Phulbari. Based on the information from the boat operators association in Dhubri and Phulbari, a total of 2,000 boat operators are registered in the area, out of which 250-300 boat operators are directly serving the target area. Their loss of business opportunities will be considered in this project. For the other operators, since demand for boat transportation between Char lands are still expected, their business will not be affected by the project. During the survey, it was also requested that boat owners who have invested in their boat, be compensated for their boat under this project which shall be considered as a loss of asset.

Furthermore, based on meetings with fishermen, there are around 100 households engaging in fishing activities along the alignment as their primary income source. Even though they can move freely in and around the river which means that they can continue their activities outside of the alignment during the construction, considering they operate hand-rowing boats, long distance travel may be difficult and there may be a possible reduction of catch during the construction period. Therefore, fishermen shall also be provided with the option to be employed in the construction work.

## 4.4 Livelihood Survey

### 1) Education Level of PAHs

The education Level of PAHs is as shown in Table 4-18. Out of total PAHs, 60.7% have had no education at all. 12.2% have lower primary and 9.8% have upper primary education, 9.0% have junior high, 4.1% have high school education and 4.8% have completed collage.

**Table 4-19: Education Level of PAPs**

	No education	Lower Primary	Upper Primary	Junior High	High School	College	Total
Dhubri	348	78	69	62	30	33	620
South Salmara	111	13	5	6	1	2	138
West Garo Hills	0	1	0	0	0	1	2
<b>Total</b>	<b>459</b>	<b>92</b>	<b>74</b>	<b>68</b>	<b>31</b>	<b>36</b>	<b>760</b>
Percentage	60.7%	12.2%	9.8%	9.0%	4.1%	4.8%	-

Source: JICA Study Team

## 2) Literacy

Table 4-19 indicates the literacy rate of the head of households of PAHs. If no education is considered as an illiterate household, then literacy rates of Dhubri and South Salmara-Mankachar District are 43.9% and 19.6% respectively. Those figures are lower than the average district rates which are 58.3% and 40.0% respectively, especially the rate in South Salmara-Mankachar District is significantly low. In Phulbari, out of 2 PAHs in Phulbari, one has primary education and the other has college education.

**Table 4-20: Literacy Rate of PAPs**

	Literacy Rate	Baseline Data
Dhubri	43.9%	58.3%
South Salmara	19.6%	40.0%
West Garo Hills	-	67.6%

Source: JICA Study Team

## 3) Occupation

Table 4-20 presents income source of the responded PAHs. All the respondents are engaged in agriculture followed by unskilled labour (46.3%). Some are self-employed (7.6%) and some are engaged in private services (3.0%) and government services (4.5%). It clearly indicates that the agriculture is the main occupation and unskilled labour is the secondary income source in the project area.

**Table 4-21: Occupation**

	Agriculture	Dairy	Unskilled Labour	Self Employed	Skilled	Private Service	Government Service	Others	Total
Dhubri	554	11	273	40	4	19	25	68	994
South Salmara	117	1	38	11	3	0	5	5	180
West Garo Hills	0	0	0	0	0	1	0	1	2
<b>Total</b>	<b>671</b>	<b>12</b>	<b>311</b>	<b>51</b>	<b>7</b>	<b>20</b>	<b>30</b>	<b>74</b>	<b>1176</b>
Percentage	100%	1.8%	46.3%	7.6%	1.0%	3.0%	4.5%	11.0%	-

Note: Multiple answers were given

Source: JICA Study Team

#### 4) Monthly household income of households

Monthly household incomes were surveyed between the ranges of below Rs. 1,000 to above 21,000. Only 0.8% earn below Rs. 1,000. The majority 42.2% are earning between Rs. 1,001 to 5,000, followed by 36.8% who earn between Rs. 5,001 to 9,000. Around 3.7% are earning between Rs. 13,001 to 21,000 per month, and 6.1% have a household income that is above Rs. 23,000. Table 4-21 indicates the district-wise total monthly income of the PAHs.

Although it is important to note that the cash income may not reflect the real well-being of PAHs engaged in subsistence agriculture, the figure indicates that people have significantly less capital for savings and investments.

**Table 4-22: Total Monthly Household Income (Rs/Month)**

	<b>Below 1,000</b>	<b>1,001-5,000</b>	<b>5,001-9,000</b>	<b>9,001-13,000</b>	<b>13,001-17,000</b>	<b>17,001-21,000</b>	<b>Above 21,001</b>	<b>Total</b>
Dhubri	6	260	207	72	14	11	42	612
South Salmara	0	57	70	5	1	1	4	138
West Garo Hills	0	0	0	1	1	0	0	2
Total	6	317	277	78	16	12	46	752
Percentage (%)	0.8%	42.2%	36.8%	10.4%	2.1%	1.6%	6.1%	-

Source: JICA Study Team

#### 5) Vulnerability

The census survey has identified 51 female-headed households (6.7%), 8 household with physically challenged members (1.1%), 1 elderly household with no immediate support member (0.1%) and 414 households who consider themselves as a BPL household (54.4%). Although this number of BPL households is self-reported without cross-checking with actual income data, this shows that those households may have low coping ability against possible negative impacts.

**Table 4-23: Vulnerability**

	<b>Female-headed HH</b>	<b>HH with physically challenged member</b>	<b>Elderly with no immediate support member</b>	<b>Below Poverty Line*</b>	<b>Total HHs</b>
Dhubri	47	8	1	363	419
South Salmara	4	0	0	51	55
West Garo Hills	0	0	0	0	0
Total	51	8	1	414	474
Percentage	6.7%	1.1%	0.1%	54.4%	

\*The figure shows results from self-reported interviews without cross checking actual income.

Source: JICA Study Team

## CHAPTER 5 Stakeholders Consultation

### 5.1 1<sup>st</sup> Round Consultation

The purpose of the stakeholders meeting at the scoping stage is to explain the project objective, a summary of the project and scoping results of environmental and social impact from the project in order to obtain comments and concerns from the likely affected communities. The meetings were held in two locations, at the starting point on the Dhubri and Phulbari side.

The main discussion points were as follows.

- 1) Outline and purpose of the Project
- 2) Explanation on the alignment
- 3) Anticipated positive and negative impacts from the project
- 4) Conveyed that the results of the meeting (especially comments and concerns) will be reflected in the project as necessary

The announcements of stakeholder meetings were informed by visiting land acquisition officers, publishing in a local newspaper and distributing pamphlets through village chiefs and local consultants (Enviro Infra Solutions Pvt. Ltd.: EIS). Stakeholder meetings were conducted with the approval from the NHIDCL. Participants include land acquisition officers, village chief, villagers, DPR consultant (AECOM), PWD officers etc. Assamese and Bengali were used in the meeting which are the languages used in the target area. The details are shown below.

The details of 1st Round Consultations with Communities are summarized in Table 5-1 and Table 5-2.

**Table 5-1: Location and Dates of Stakeholder meetings**

No.	Date	Location	Total	Male	Female	From Char	Coverage
1	24/10/2016	Irrigation IB, Dept. Of Water Resources, Phulbari	68	68	0	02	Phulbari and South Salmara-Mankachar District
2	25/10/2016	EQRA Academy School, Adabari Chomor, Dhubri	119	119	0	23	Dhubri District

Source: JICA Study Team

**Table 5-2: Discussion in Stakeholder Meetings**

No.	Comments	Answers
1	<ul style="list-style-type: none"> <li>• Compensation of land should be given on the basis of current market price and not by the price that is fixed by the government</li> <li>• Community meetings shall be conducted separately involving all the affected villages and affected families.</li> <li>• Request compensation and income generation method for boat owners and boat operators</li> <li>• Provide proper connectivity of the</li> </ul>	<ul style="list-style-type: none"> <li>• Amount of compensation will be calculated based on the current market value</li> <li>• Community meetings will be conducted to cover affected villages</li> <li>• Employment opportunities in other modes of transportation (tuktuk, truck etc.) may increase after the project. Thus, income generation method with the provision of trainings will be considered in an income restoration program.</li> <li>• Multiple alignments were considered and the alignment with the least disturbance in the villages was selected. Adequate compensation</li> </ul>

No.	Comments	Answers
	bridge to National Highway with minimal disturbance in nearby villages	package will be designed for those affected by the project.
2	<ul style="list-style-type: none"> <li>Start point of bridge shall be shifted to minimize the impact on local residences.</li> <li>Local people preferred compensation in terms of land for their acquired land</li> <li>Community meetings shall be conducted to cover affected villages</li> <li>Request separate compensation and generation of alternative employment to boat owners and boat operators as proposed bridge will have a major impact on their livelihood.</li> </ul>	<ul style="list-style-type: none"> <li>The proposed alignment was selected considering the future connection to national roads. However, the proposed starting point is still under discussion and minimization of the impact will be considered.</li> <li>DC is responsible for finding alternative land, in consultation with the target community</li> <li>Community meetings will be conducted to cover affected villages</li> <li>Alternative employment may be expected in other modes of transportation. Assistance for the transition of occupation will be considered in an income restoration program.</li> </ul>

Source: JICA Study Team

## 5.2 Community Meeting

For the purpose of gathering comments from the communities in concerned areas, five community meetings were organized. The locations of the meetings were identified based on the concentration of PAPs along the alignment. Participants in the meetings were village chiefs and villagers, including displaced persons and vulnerable groups.

The main points explained and discussed in the meetings were as follows:

- 1) Outline and Purpose of the Project
- 2) Recommended alignment
- 3) Anticipated positive and negative impact from the project
- 4) Socio-economic status of the concerned community

During the community meetings, the comments from local communities regarding the location of starting point and ending point were confirmed. As a result, the starting point was shifted to minimize the impact. As for the ending point, the reason for the selection of the point was explained to the local community which was helpful to gain understanding from the local people.

Summary of the results are shown in Table 5-3 and Table 5-4.

**Table 5-3: Location and Dates of Community meeting**

No.	Date	Location	Total	Male	Female	From Char	Coverage
1	26/10/2016 @12:00	M. E. School, Adabari, Dhubri	22	16	6	15	Starting point of Dhubri
2	26/10/2016 @16:00	Ponchu Ghat in Dhubri	17	17	0	09	Ferry point in Dhubri
3	27/10/2016 @11:00	Phulbari	20	10	10	03	Lower Phulbari
4	27/10/2016 @13:30	South Salmara	15	15	0	05	South Salmara

5	27/10/2016 @ 16:30	Bauskata and Bororavatari	22	22	0	20	Bauskata, Bororavatari, Phulbari
---	-----------------------	------------------------------	----	----	---	----	-------------------------------------

Source: JICA Study Team

**Table 5-4: Discussion in Community meetings**

No.	Comments	Answers
1	<ul style="list-style-type: none"> <li>Local people should be informed about compensation packages, valuation methods prior to land acquisition.</li> <li>Preference shall be given to local people to be employed in the construction works.</li> <li>Suggested that the location of start point of the bridge should be shifted to Chandachal Bridge, which is 500m away from the present point to minimize the impact.</li> </ul>	<ul style="list-style-type: none"> <li>Amount of compensation will be determined by DC based on market value (details of the compensation package and the amount will be explained in separate meetings at the end of the survey).</li> <li>Mechanism for employing local people will be proposed for the construction work which requires unskilled labours.</li> <li>The proposed alignment was selected considering the future connection to national roads. However, the proposed starting point is still under discussion and minimization of the impact will be considered.</li> </ul>
2	<ul style="list-style-type: none"> <li>Concern that the aquatic biodiversity will be deteriorated and whether fishing environment will be disturbed.</li> <li>Concern that boat operators will become unemployed after completion of the project.</li> <li>New means of livelihood shall be considered for affected people. Preference shall be given to local people for construction work.</li> </ul>	<ul style="list-style-type: none"> <li>The impact on the fishery activities will be assessed and mitigation measures will be implemented if negative impact is to be expected.</li> <li>Boat operation service to Char islands will continue. Regarding the loss of business opportunities, an adequate income restoration program will be considered with input from boat operator communities.</li> <li>Employment in construction work and income restoration program for affected people will be considered and proposed.</li> </ul>
3	<ul style="list-style-type: none"> <li>Suggested that end point of the bridge be shifted to Bangshidua Bridge, which is 300m north from the present point for better connection to existing road.</li> <li>Will there be a possible interruption of river corridor isolating habitats with potential decrease in species numbers and local biodiversity.</li> </ul>	<ul style="list-style-type: none"> <li>Affected people will increase as the alignment moves closer to towns. The end point of the bridge was well considered among several alternative alignments and the one with least impact on villages was selected.</li> <li>Impacts on the river flow during the construction period will be well considered and specific construction method will be employed to minimize the disturbance.</li> </ul>
4	<ul style="list-style-type: none"> <li>Do not have full information about project affected persons and would like to have clarification about the alignment.</li> <li>Fair and timely compensation shall be paid to the affected people.</li> </ul>	<ul style="list-style-type: none"> <li>Clarification about the alignment will be explained, and affected persons will be identified during census survey.</li> <li>Amount of compensation will be determined based on market value. The consideration will be given to avoid the delay of payment.</li> </ul>
5	<ul style="list-style-type: none"> <li>Concern that construction activities could damage their crops.</li> </ul>	<ul style="list-style-type: none"> <li>The land acquisition will be completed before the construction so no damage to crops are</li> </ul>

No.	Comments	Answers
	<ul style="list-style-type: none"> <li>• Compensation shall be paid for standing crops if the land will be acquired before harvesting.</li> <li>• Ensure that individuals and groups have opportunities to participate in the construction of the bridge.</li> </ul>	<p>expected during construction work.</p> <ul style="list-style-type: none"> <li>• Standing crops will be subject to compensation.</li> <li>• Mechanism to give preference of employing affected people and local people on construction works will be considered.</li> </ul>

Source: JICA Study Team

Starting and ending points, which were pointed out in the stakeholder meetings are as shown in the map below. As for the starting point, the suggested location is the connection point to the proposed NH-27. Final alignment was decided to connect to NH-27 without connecting existing roads which was originally planned. The point mentioned for the ending point is the location where a new bridge was recently built. However, it was explained that it is more reasonable to connect to the existing road, considering the better connectivity.



Source: JICA Study Team

**Figure 5-1: Starting location mentioned in the meeting**



Source: JICA Study Team

**Figure 5-2: Ending location mentioned in the meeting**

### 5.3 Focus Group Discussion

In order to understand the issues from women’s perspective and concerns from boat operators and fishermen, three focus group discussions were carried out. Participants in the meetings were women in surrounding villages, boat operators from boat operators association, and fishermen in the target area.

The main points explained and discussed in the meetings were as follows.

- 1) Outline and Purpose of the Project
- 2) Recommended alignment
- 3) Anticipated positive and negative impacts from the project
- 4) Socio-economic status of the concerned groups

As a result, the area of activities, means of livelihoods of boat operators and fishermen and their requests were identified. Based on the findings, they were included in the beneficiaries of compensation and assistance.

The details are shown below.

**Table 5-5: Location and Dates of Focus Group Discussions**

No	Date	Location	Total	Male	Female	From Char	Coverage
1	26/10/2016 @10.00	M.E. School, Adabari Chomor, Dhubri	9	0	9	02	Womens group
2	26/10/2016 @14.00	Panchu Ghat, Dhubri	13	13	0	07	Boat operators
3	30/06/2017 @10.00	M.E. School, Adabari Chomor, Dhubri	50	50	0	18	Fishermen

Source: JICA Study Team

**Table 5-6: Topics in Focus Group Discussions**

No.	Comment	Response
1	<ul style="list-style-type: none"> <li>• Amount of compensation for land acquisition and resettlement shall be sufficient for the family, even during the transition period.</li> <li>• Payment shall be made on time.</li> <li>• Preference shall be given to women to be employed in the construction work.</li> </ul>	<ul style="list-style-type: none"> <li>• Amount of compensation will be calculated considering that the affected people will be able to retain their livelihood after the project.</li> <li>• The process will be considered to coordinate with NHIDCL, DC, etc. that payment will not be delayed.</li> <li>• Equal employment opportunities will be sought for women to engage in construction work taking into account their needs, competence and social situations in the area.</li> </ul>
2	<ul style="list-style-type: none"> <li>• Preference shall be given to boat operators for construction work.</li> </ul>	<ul style="list-style-type: none"> <li>• Mechanism to give preference of employing affected people on construction</li> </ul>



	<ul style="list-style-type: none"> <li>Request assistance for alternative employments (road transport etc.) after completion of the bridge construction.</li> <li>Request some form of livelihood programs.</li> </ul>	<p>works will be considered.</p> <ul style="list-style-type: none"> <li>Boat operation service to Char lands will continue and demand for the movement of goods and people may increase. Regarding the loss of business opportunities, in addition to the construction work during construction periods, an adequate income restoration program will be considered with input from boat operator communities.</li> </ul>
3	<ul style="list-style-type: none"> <li>Whether the fishing activity will be affected by the project and the impact on the volume of catches expected during the construction stage.</li> <li>If there are employment opportunities in the project, people will be very much interested.</li> </ul>	<ul style="list-style-type: none"> <li>During the construction work, vibration may have some impact on fish at the location of pier construction. However, vibration it expected during the construction (day-time) and long-term impact is not anticipated. In case catch volume is impacted, employment options will be provided for fishermen to engage in construction works.</li> <li>Mechanism to give preference of employing affected people on construction work will be considered.</li> </ul>

Source: JICA Study Team

#### 5.4 2<sup>nd</sup> Round Consultation

The purpose of second round stakeholder meetings was to inform the results of EIA, and explain anticipated impacts as well as mitigation measures to confirm the consent from stakeholders.

Main discussion points are as follows.

- 1) Outline and objective of the project
- 2) Reason of recommended alignment
- 3) Result of Environmental Assessment (anticipated positive and negative impacts)
- 4) Mitigation measures and monitoring plan

As for RAP, the result of the census survey and compensation policy, as well as rehabilitation and income restoration program were explained to gain consent from PAPs.

Main discussion items are as follows.

- 1) Scale of impact based on result of census survey
- 2) Compensation policy
- 3) Rehabilitation and income restoration program

Information disclosure for the 2nd stakeholder meeting was carried out by visiting land acquisition officers, publishing in a local newspaper, and distributing pamphlets through village chiefs and local consultants (Enviro Infra Solutions Pvt. Ltd.: EIS). The participants include NHIDCL, DPR consultant (AECOM), land acquisition officers from each DC offices, village chiefs, villagers including PAPs, boat operators, fishermen, etc. Assamese and Bengali were used in meetings which are the common languages in the target area.

Summary of the meetings is shown in the table below.

**Table 5-7: Details of the Second Round Consultation Meetings**

No.	Date	Location	Total	Male	Female	From Char	Coverage
1	2017/7/4 @11:00	M.E. School, Chagalchora II, Dhubri	121	113	8	47	Adabari Part-II, Airanjangla Part-I&II, Bhassanir char Part-I, Chagal chora Part-I&II&III
2	2017/7/4 @15:00	Boat operator office, Jogmaya ghat, Dhubri	56	53	3	18	Kathiar Alga, Bauskata Part-IV&VI, Basir Char, Aminerchar, Chaiter Chor Part-I
3	2017/7/5 @11:00	Phulbari Youth Club, Phulbari	100	94	6	34	Phulbari, Baladoba, Bauskata, Saboratory, Chaiter Chor Part-I, Hatsingwari
4	2017/7/5 @14:00	M.V. School, Bororawatre part-I, Dhubri	28	16	12	21	Bororawatre Part-I&II

Source: JICA Study Team

**Table 5-8: Participation Details of the Second Round Consultations**

No.	Comment	Answer
1	<ul style="list-style-type: none"> <li>What kind of compensation and assistance will be provided to agriculture labourers?</li> <li>How will the rate for land be calculated?</li> <li>What will be the process of land acquisition and how to identify the land owner?</li> <li>If the new owner's name is not listed, will they get compensation?</li> <li>Will non-title holders get compensation for land, structure and employment opportunities?</li> <li>Are there employment opportunities for graduate students?</li> </ul>	<ul style="list-style-type: none"> <li>Agriculture labours will get at least minimum wage of 200 days. Employment opportunities will also be provided during construction and will be entitled to get training for business opportunity</li> <li>Rate of the land will be calculated as per the latest land revenue records in the area.</li> <li>First, 3A notification will be issued and field verification will be followed based on the government land record. After the 3D notification, there will be a hearing objection period before finalization.</li> <li>Non-title holders will get compensation for structures and standing crops, as well as are entitled for assistance. Training will be provided and possibly issue certificates for employment opportunities.</li> <li>For graduates, there are National Skill Development Programs where they can get special training. Even in the construction work, they may get employed in a position considering their capacity.</li> </ul>
2	<ul style="list-style-type: none"> <li>What kind of assistance will be provided to the boat operators and whether boat operators will get employment opportunities?</li> <li>One boat cost nearly Rs. 25-30 Lakh, after completion of this</li> </ul>	<ul style="list-style-type: none"> <li>Boat operators are also provided with opportunities to engage in construction work. During the period, vocational training opportunities will be offered to prepare for the transition to new occupations.</li> <li>The construction period is around six years. During this period, the boat can be used for transportation of goods and workers in addition to normal services.</li> </ul>

No	Comment	Answer
	<p>project there will be no use of these boats, will boat owners get any compensation?</p> <ul style="list-style-type: none"> <li>• Will fisherman be affected by this project?</li> <li>• Will fisherman get any compensation?</li> </ul>	<p>However, considering that usage opportunities decrease after the project, the boat will also be considered for compensation.</p> <ul style="list-style-type: none"> <li>• During construction work, there will be impact on fishermen in the project area, but fishing can continue upstream and downstream of the river.</li> <li>• Employment opportunities will be provided to fishermen during the construction work.</li> </ul>
3	<ul style="list-style-type: none"> <li>• When and to whom will employment opportunities be offered. How should I apply?</li> <li>• Is there any plan to develop bridge cum railway?</li> <li>• When and how will compensation be provided?</li> <li>• What is the market rate of the land and buildings to be decided based on?</li> <li>• What should I do if there is a problem with land ownership?</li> <li>• What kind of compensation can be taken if leasing the land and holding the building on that land?</li> </ul>	<ul style="list-style-type: none"> <li>• Employment opportunities will be offered to residents of the target area when construction work will be carried out. NHIDCL will contract with contractors so the application shall be submitted to the contractors. NHIDCL is considering to state in the contract that priority should be given to local employment as a condition.</li> <li>• In this project, railway is not included in the plan.</li> <li>• First of all, DC will conduct a field survey and confirm the affected land, affected people and the price. After the compensation is paid to the affected people, land acquisition will start.</li> <li>• Market rate for the land will be based on the zonal valuation which is set by the land sale price. Buildings are also calculated at market prices. The amount will be decided based on a site investigation.</li> <li>• If there is a land ownership problem, DC office will be the window agency. The land ownership will be reviewed with documents and records.</li> <li>• There will be no compensation for the land, but structures and crops will be compensated and assistances will be provided. If you have been paying the lease fee of land for a long time, the amount after land acquisition will be refunded.</li> </ul>
4	<ul style="list-style-type: none"> <li>• In the case the land has been submerged and became government land in the past, can the former owner with the previous land documents claim compensation?</li> <li>• Do residents of affected villages have access to employment opportunities for construction work?</li> </ul>	<ul style="list-style-type: none"> <li>• In principle, land that became government land will not be subject to compensation, but compensation for standing crops and financial support and support for livelihood restoration will be provided. However, during the site verification stage, the current and past land ownership will be properly reviewed.</li> <li>• It is assumed that employment opportunities for construction work will also be provided to residents of target villages.</li> </ul>

Source: JICA Study Team



Source: JICA Study Team

Figure 5-3: Stakeholders/Community Meetings



## **CHAPTER 6      Resettlement and Rehabilitation Policy**

### **6.1      Cut-off-date**

At the time of this survey, the cut-off-date has not been declared in Assam and Meghalaya State. Therefore, in this survey the cut-off-date is set as the starting date of the census survey. As per respective provisions, Assam State will follow the NH Act 1956, and Meghalaya State the LARR Act 2013. The cut-off-date in Assam State will be the issue date of 3A notification indicating the target villages and land areas which will be prepared by respective DCs approved by NHIDCL. As for Meghalaya State, the issue date of SIA notification from the state government will be recognized as the cut-off-date.

- This Survey: 24 November, 2016
- Dhubri, South Salmara-Mankachar District: expected in July, 2017
- West Garo Hills District: not yet decided

The cut-off date will be officially declared by the respective DCs along with the disclosure of the RAP report, and will be disclosed in the project area through local newspapers. For the purpose of preventing an influx of people into the project area, PAPs who settle in the affected areas after the cut-off date will not be eligible for compensation.

### **6.2      Eligibility**

The status of title holder / non-title holder in the target area can be categorized as follows.

- Private land with periodic patta<sup>6</sup> (Titleholders)
- Private land with periodic patta or purchase record but not yet registered (Non-titleholder can claim rights)
- Government land without any certificates (Non-titleholder cannot claim rights)

### **6.3      Compensation Policy**

Despite that efforts are made to minimize resettlement impacts, the proposed project will affect land and structures. As a result of which physical displacement will arise and resettlement will be required. The resettlement plan shall furnish fair compensation for displaced households.

#### **1) Land compensation**

In case of land compensation, the DC is responsible for identifying land for providing adequate and appropriate replacement land for PAHs who requests land compensation, rather than cash compensation. If PAHs request land compensation, the DC shall secure land as close to the original location as possible. The condition for the relocation site shall be better housing at resettlement sites, with comparable access to employment and production opportunities, and infrastructure with utility and community services.

#### **2) Cash compensation**

According to the census survey, most of the PAHs preferred cash compensation and self-relocation over land compensation. Therefore, cash compensation at market rate along with relocation

---

<sup>6</sup> A certificate of land use rights which is considered as a land title in the Assam State.

assistance is considered a more practical solution in this case. In case of cash compensation, only titleholders are eligible for compensation for the land. Non-title holders are eligible for structures and crops, if any, excluding the land. Details are given in the entitlement matrix.

### 3) Basic compensation and assistance

The PAPs will be entitled to the following six types of compensation and assistance packages:

- a) Compensation for the loss of land at replacement cost
- b) Compensation for structures (residential/commercial) at their replacement cost without depreciation
- c) Crops/ trees at their market cost
- d) Assistance in lieu of the loss of business/ wage income and income restoration assistance. In case of boat operators, compensation will be provided if the needs are confirmed.
- e) Assistance for shifting and provision for the relocation site, if required
- f) Rebuilding and/ or restoration of community resources/facilities

## 6.4 Income Restoration Program

The purpose of restoration of livelihoods is to ensure that the PAPs are able to at least regain their standard of living. In this project, the eligible people for the restoration program include the following;

- PAPs whose assets are affected (land, residential and commercial structures)
- PAPs whose livelihoods associated with loss of assets are affected (agriculture labourers)
- PAPs whose livelihoods are affected from the Project (boat operators, boat owners, fishermen etc.)

To restore and enhance the economic conditions of the PAPs, their present socio-economic status and potential opportunities in and around the affected communities should be considered. An income restoration program will be developed and implemented by the district government, with the assistance from RAP implementation NGO in order to identify suitable options. Inputs and feedbacks from relevant stakeholders and communities must be also incorporated in the program through a series of discussions and workshops.

Possible income restoration programs considered at this stage are as follows.

### 1) Preference in employment in the Project

Employment opportunities shall be provided to the local community including all the PAPs. Agriculture labourers, boat operators and fishermen whose livelihoods are likely to be affected from the project are also provided with the opportunities to engage in the construction work of the project. The vulnerable PAPs and women should have equal opportunities to be employed in the project, taking into account their needs, competence and social situation of the area. For those who do not have the skills in construction work and other related works, job training shall be provided prior to the employment in the project in order to provide equal opportunities to other potential candidates.

The NHIDCL local office, with the assistance from NGO will liaise with the contractor to seek employment opportunities in construction related activities for PAPs. Especially with regard to women's employment, it is considered necessary for NGOs to confirm the needs of women who need to take care of children and elderly. Based on the identified needs, NHIDCL shall propose the contractor to consider employment method for women such as working palces and time zones. In

addition, preferably a mandatory clause in the contract with the contractor should be added to give preference to local labour, as a measure of corporate responsibility of the contractor.

## 2) Skill improvement training

Contents of job training will be considered based on the current local economic activities and occupational opportunities in the target area. Interviews with the applicants on their interest, and the demand for those occupations and skill improvement are necessary to identify the training contents. At the same time, possible collaboration with vocational training centers, and programs in the surrounding area and with existing training courses should also be explored.

Vocational training programs that could be considered at this stage are as follows.

- Considering that agriculture is the major source of income, it may be useful to provide guidance from Krishi Vigyan Kendras (KVK<sup>7</sup>) for increasing productivity and introducing suitable breeds of crops.
- Based on the fact that land transportation needs will increase in addition to river transportation, driver training on tricycles and trucks together with the support for their license registration may be useful.
- Improved distribution network will increase access to the (local) market, so guidance on the trading and marketing of produce is considered to be effective.

## 3) Assistance for starting up new businesses

New business opportunities shall be surveyed with the assistance from experts by reviewing the market situation in the target area. Assistance should be provided to get access to local banks with lower interest rates. More specifically, introduce local banking programs, coordinate with banks for the relaxation of conditions, and provide training on how to utilize microfinance which can be done through NGOs.

The following new business initiative can be supported.

- The launch of small stores and establishment of bases for selling products and trading goods may be new business opportunities.
- Credit schemes can be applied to procure funding for the initial investments, including purchasing new means of transportation as described above.

## 4) Additional Support from On-going Poverty Reduction Programs

In India, governments at the village and district levels are now responsible for the planning and implementation of all anti-poverty programs funded by the central and state governments. The National Skill Development Program, the initiative of the central government and Swarnjayanti Gram Swarajgar Yojna (SGSY<sup>8</sup>), specially catered for those below the poverty line are examples. The implementing NGO will work with the panchayat governments to make those programs available to PAPs, and also play a proactive role to mobilize PAPs to get benefits from various ongoing pro-poor programs.

## 5) Provision of subsistence allowance to PAHs

<sup>7</sup> Krishi Vigyan Kendras (KVK) is the Agricultural Technology Dissemination center of the India Agricultural Research Council (ICAR) and has several regional centers in each state. The trainings provided by KVK Dhubri include provision of technical information and trainings on agriculture, livestock and fisheries.

<sup>8</sup> Swarnjayanti Gram Swarajgar Yojna (SGSY) is a program that provides support for private entrepreneurs with the aim of improving livelihoods for the poor. The support includes organizing self-help group, providing training, loan and marketing support, etc.



People living in the project area are having low literacy rate and low income level and considered to be vulnerable to the change of environment. Therefore, all PAHs should be entitled for monthly allowance regardless of their displacement requirements (according to Acts and Rules of India, monthly allowance is only for displaced families).

**Table 6-1: Entitlement Matrix**

Type	Affected People	Entitlement	Details
Loss of land	Title holder	Compensation , Assistance	a) Minimum 60 days advance notice b) Compensation at replacement cost <sup>(*2)</sup> c) One-time resettlement allowance Rs. 50,000/PAH d) Monthly subsistence allowance Rs.3,000/PAH×12months <sup>(*1)</sup>
	Non-title holder	Assistance	a) Minimum 60 days advance notice b) One-time resettlement allowance Rs. 50,000/PAH c) Monthly subsistence allowance Rs.3,000/PAH×12months <sup>(*1)</sup>
Loss of structure	All PAH	Compensation , Assistance	a) Minimum 60 days advance notice b) Compensation based on replacement cost <sup>(*2)</sup> c) Right to salvage materials d) One-time resettlement allowance Rs.50,000/PAH e) One time shifting allowance Rs.50,000/PAH f) Monthly subsistence allowance Rs.3,000/PAH×12months <sup>(*1)</sup>
Loss of tree and crops	All PAH	Compensation	a) Minimum 60 days advance notice b) Harvest before acquisition. Compensation based on market price for standing crop, if advanced notice was not provided
Loss of shops	Title holder	Compensation , Assistance	a) Minimum 60 days advance notice b) Compensation based on market price <sup>(*2)</sup> c) Right to salvage materials
Loss of livelihood	All PAHs	Assistance	a) Financial assistance Rs. 25,000/PAH b) Preference in employment under the project <sup>(*3)</sup> c) Training and assistance for business opportunity <sup>(*3)</sup>
	Agriculture Labourer	Assistance	a) Minimum wage for 200 days b) Preference in employment under the project <sup>(*3)</sup> c) Training and assistance for business opportunity <sup>(*3)</sup>
	Boat operator	Compensation, Assistance	a) Compensation of the boat at replacement cost (direct service from Dhubri – Phulbari) b) Preference in employment under the project <sup>(*3)</sup> c) Training and assistance for business opportunity <sup>(*3)</sup>
	Fishermen	Assistance	a) Preference in employment under the project <sup>(*3)</sup> b) Training and assistance for business opportunity <sup>(*3)</sup>
Vulnerable people	Vulnerable people	Assistance	a) Additional assistance of Rs.25,000/PAH over above b) Preference in employment under the project <sup>(*3)</sup> c) Training and assistance for business opportunity <sup>(*3)</sup>
Loss of public property	District government	Replacement or Restoration	a) Based on the request of affected villages or districts
Impact	Title holder	Compensation	a) Land: Rental based on market price during occupied

Type	Affected People	Entitlement	Details
during construction		n, Assistance	period. Hand back the land in the original condition b) Structure: Compensation based on market price c) Livelihood: Rs.3,000/PAH /month during occupied period
	Non-title holder	Assistance	a) Livelihood: Rs.3,000/PAH /month during occupied period
Unanticipated impact	All PAPs	Assistance	a) Take appropriate measures by utilizing GRM based on the resettlement policy GRM

Source: JICA Study Team

(\*1) Amounts of allowances are based on the LARR Act 2013. For agriculture labours, the Assam LARR Rule 2015 will be applied having more detailed regulation. Also, since the people living in the project area are considered to be vulnerable to the changes of environment, all PAHs will be also included as beneficiaries of the subsistence allowance. The conditions of recipients of financial support are as follows.

- Resettlement allowance (Rs.50,000): All PAHs
- Shifting allowance (Rs. 50,000): Displaced family
- Subsistence allowance (Rs. 3,000×12 months): All PAHs
- Assistance for loss of livelihoods (Rs. 25,000): All PAHs whose livelihoods are lost
- Assistance for vulnerable HH (Rs. 25,000) PAHs with vulnerable people

(\*2) As per Assam LARR Rule 2015 and LARR Act 2013, replacement cost for land and structures will be calculated as follows, based on the market price notified by the district government. Also, stamp duty and other fees payable for registration of the land or house will borne by the government.

- Land price will be calculated by multiplier (depends on rural or urban) and solatium.
  - Rural areas =  $A(\text{Market price} \times \text{Multiplier}(1.5-2.0)) + A \times 100\% \text{ Solatium} + A \times 12\%$
  - Urban areas =  $A(\text{Market price} \times \text{Multiplier}(1.0)) + A \times 100\% \text{ Solatium} + A \times 12\%$
- Structure price will be based on market price without depreciation
  - $\text{Market price} \times 100\% \text{ Solatium}$

The definition of the replacement cost by World Bank Guideline (WB OP4.12) indicates that calculation of the replacement cost should not take into account depreciation of the asset. The same provision shall be followed to determine the cost.

(\*3) According to LARR Act 2013, the appropriate Government shall ensure that all PAHs are provided with the following options. At this stage, provision of the option for employment opportunities and appropriate trainings will be assumed.

- Provision of employment opportunities and appropriate trainings
- Rs. 5,00,000/family
- Rs. 2,000/family×20years

## **CHAPTER 7      Grievance Redress Mechanism**

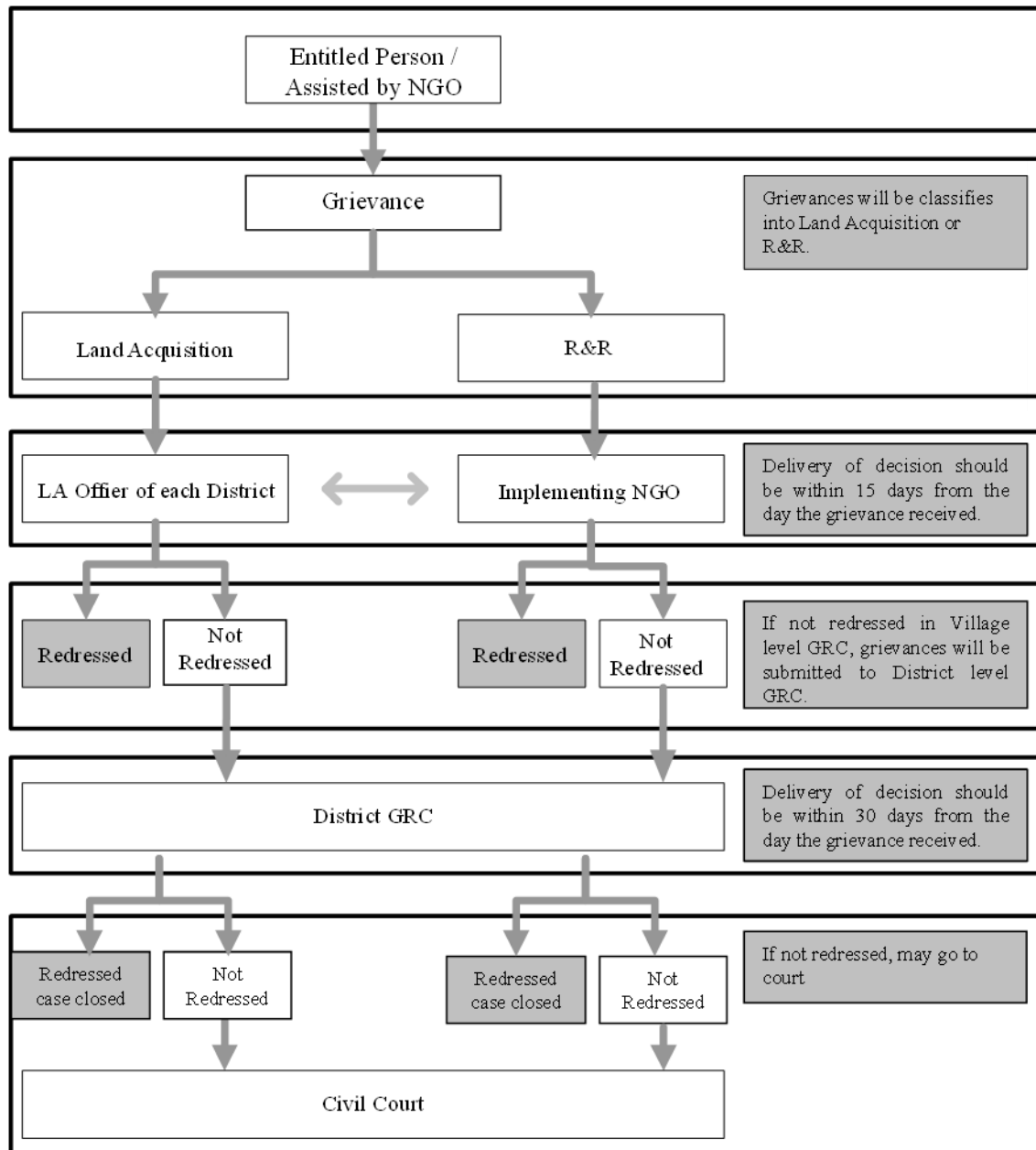
In the RAP implementation, there is a need for an efficient grievance redress mechanism (GRM) that will assist the PAPs in raising their issues and concerns, and resolving queries and complaints. For this purpose, a Grievance Redress Committee (GRC) will be established to resolve most grievances, if not all in the project.

Grievances will be redressed at the local and district level for this project. At the local level, PAPs, NGO, and land acquisition officers of respective districts will be involved and if needed, village leaders will also be invited for resolving issues. At the district level, the GRC will be headed by the DC or his designated representative; while representatives from NHIDCL local office, representatives of PAPs, village leaders, and NGOs will be the members. In the West Garo Hills District, the Autonomous District Council will also join in the GRC. Representatives of PAPs should include representatives from women groups, non-titleholders and vulnerable PAPs.

It is proposed that GRC will meet regularly, at least twice a month, on a pre-fixed date. The committee will look into grievances of the PAPs, assign responsibilities to resolve the issues, and deliver decisions within the due date. The claims will be reviewed and resolved within 15 days at the village level and 30 days at the district level, from the date of submission to the committee. PAPs can call upon the support of the NGO to assist them in presenting their grievances or queries to the GRC.

PAPs, who would not be satisfied with the decision of the GRC, will have the right to take the grievance to the EA head office for its redress. Failing the redressal of grievance at NHIDCL, the PAPs may take the case to Judiciary. Taking grievances to Judiciary will be avoided as much as possible and the NGO will make utmost efforts at reconciliation at the GRC level. All grievances received (written or oral) and their redress will be recorded and documented properly. The NHIDCL will ensure that such records will be made available to the external monitor.

The procedure and role of the GRM is as shown below;



Source: JICA Study Team

**Figure 7-1: Grievance Redress Mechanism**

## CHAPTER 8 Institutional arrangement

For the implementation of RAP, there will be a set of institutions involved at various levels and stages of the project. As per Indian acts and regulations, land acquisition, resettlement and rehabilitation activities must be executed by the state government. In practice, the state government entrusts tasks to the district government headed by the DC. Therefore, all activities will be implemented by the district government and the decision-making power lies within the DC. For Meghalaya state, being under jurisdiction of the sixth schedule of the constitution, Autonomous District Councils (ADC) will also be involved in the approval of project.

The primary institutions who will be involved in this implementation process are follows. The proposed institutional arrangement with their roles and responsibilities are shown in Table 8-1.

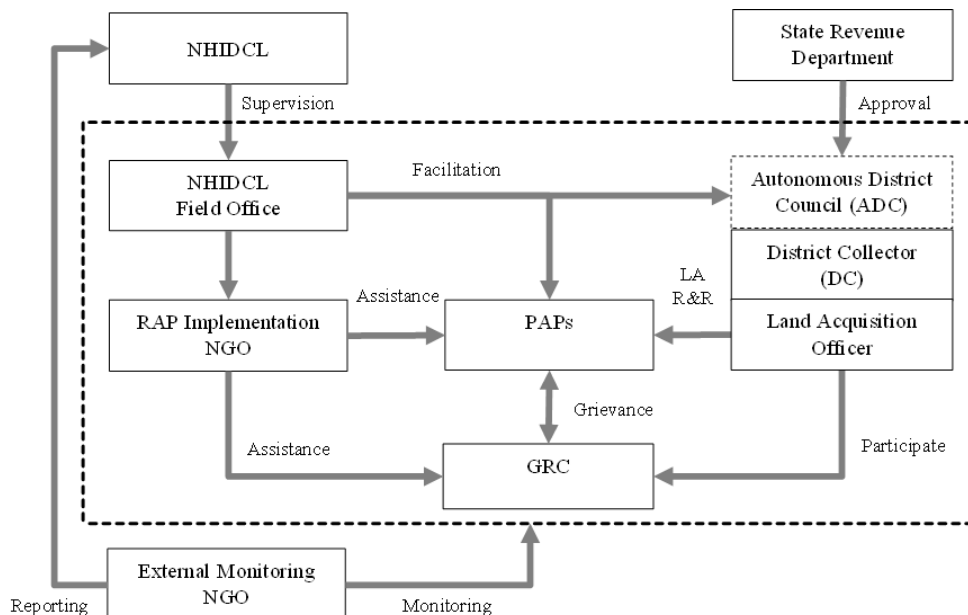
- National Highway and Infrastructure Development Corporation Ltd (NHIDCL)
- NHIDCL Regional Office
- Autonomous District Councils (ADC)
- Deputy Commissioner / District Collector (DC)
- Non-Government Organization (NGO)
- Grievance Redress Committee (GRC)

**Table 8-1: Implementation Institute and Their Roles**

Name	Members and Roles
<b>Central Level Institution</b>	
NHIDCL	<ul style="list-style-type: none"> <li>• Project Implementation Agency</li> <li>• Ensure availability of budget for R&amp;R activities</li> <li>• Responsible for coordination and monitoring of overall processes</li> </ul>
<b>State Government</b>	
Revenue and Disaster Management Department	<ul style="list-style-type: none"> <li>• Confirm notification of procedure for Land Acquisition</li> </ul>
Meghalaya Institute of Governance (MIG)	<ul style="list-style-type: none"> <li>• SIA Implementation agency for Meghalaya</li> </ul>
<b>District Government</b>	
West Garo Hills Autonomous District Council (ADC)	<ul style="list-style-type: none"> <li>• Issue No Objection Certificate for Land Acquisition</li> </ul>
District Collector / Deputy Commissioner (DC) of each District	<ul style="list-style-type: none"> <li>• Responsible for Land Acquisition, Resettlement and Rehabilitation</li> </ul>
Land Acquisition Officers of each District	<ul style="list-style-type: none"> <li>• Implementation land acquisition and resettlement</li> </ul>
<b>Other Implementation Agencies</b>	
NHIDCL Local Office	<ul style="list-style-type: none"> <li>• Oversee and monitor R&amp;R activities implemented by district governments, assisted by NGO</li> <li>• Conduct internal monitoring</li> </ul>
Non-Governmental Organization (NGO)	<ul style="list-style-type: none"> <li>• Act as a representative of PAPs in communicating with district governments and NHIDCL local office</li> <li>• Assist PAPs through Land Acquisition, Resettlement and Rehabilitation activities</li> <li>• Conduct external monitoring</li> </ul>
Grievance Redress Committee	<ul style="list-style-type: none"> <li>• Coordinate and resolve grievances submitted by</li> </ul>

(GRC)	PAPs
Project affected persons (PAP)	<ul style="list-style-type: none"> <li>• Participation in the process of PAP activities</li> </ul>
Contractor	<ul style="list-style-type: none"> <li>• Consult with DC and community regarding location of construction camps</li> <li>• Restore the land to equal or better condition upon completion</li> </ul>

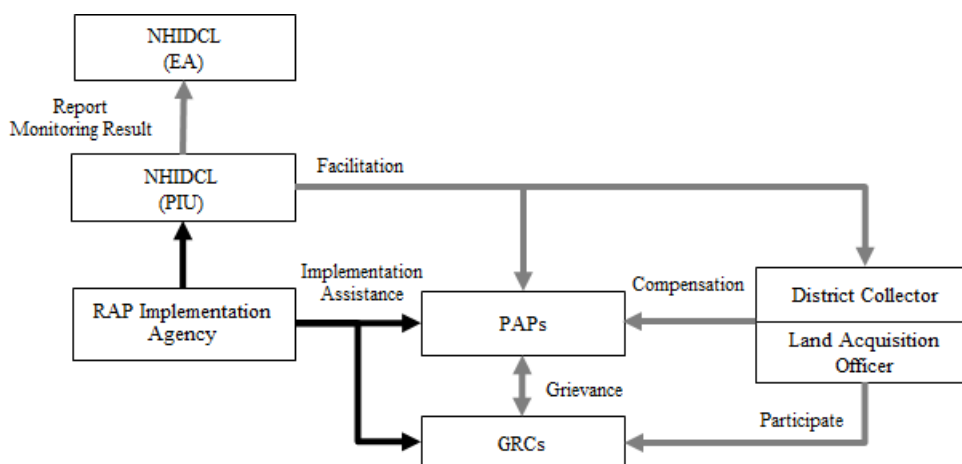
Source: JICA Study Team



Source: JICA Study Team

**Figure 8-1: Institutional Arrangements for RAP Implementation**

Implementation of RAP will be supported by RAP Implementation agency as shown below.



Source: JICA Study Team

**Figure 8-2: Support Arrangement for RAP Implementation**

## **CHAPTER 9      Resettlement Schedule**

The proposed land acquisition and resettlement and rehabilitation activities are divided into three broad categories based on the stages of work, and process of implementation. The details of activities involved in these three phases are discussed below.

### **9.1      Preparation phase**

The major activities to be performed in this period include preparation of RAP, submission of RAP for a government approval, appointment of NGO, establishment of NHIDCL Field Office and GRC etc. The information campaign and community consultation will be initiated from this stage, and will continue until the end of the project. Information will be disseminated using brochures and leaflets that will inform the community about the resettlement policy, entitlements, and any other necessary information deemed relevant for the effective implementation of the project.

### **9.2      Implementation phase**

In the RAP implementation phase, land acquisition, payment of compensation and provision of all eligible assistances will be carried out by the DCs, assisted by NGOs using the GRM, and in consultation with PAPs wherever necessary. Activities including relocation of PAPs and initiation of income restoration program will follow. After the acquisition of lands, notice for the start of civil work will be issued.

### **9.3      Monitoring phase**

The monitoring will be under the responsibility of the NHIDCL field office, and carried out by the RAP implementing NGO from project start to complementation. Recognizing that the project will have an impact on a relatively large number of PAPs, an external monitoring and reporting expert will be hired for the project.

The Resettlement Schedule is shown below. It will be implemented in accordance with principal activities as below, however, the sequence may change or delays may occur due to circumstances beyond the control of the project, and accordingly, the time shall be adjusted for the implementation of the plan.

Table 9-1: Resettlement Schedule

No.	Activity	2015		2016				2017				2018				2019				Responsible Agency			
		3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Management	Implementation		
<b>Preparation Stage</b>																							
1	Preparation, finalization of alignment																			NHIDCL	AECOM		
2	Issue No Objection Certificate (NOC)																			NHIDCL	ADC		
3	Conduct census survey																			NHIDCL	AECOM		
4	Preparation of RAP																			NHIDCL	AECOM		
5	Declaration of cut-off-date																			DC	DC		
6	Identification of PAP and compensation																			DC	DC		
7	Disclosure of RAP																			NHIDCL/DC	DC		
8	Consultations with PAPs																			NHIDCL	DC		
9	Procurement of NGO																			NHIDCL	NHIDCL local		
10	Review RAP																			NHIDCL	NGO		
11	Establishment of GRC																			NHIDCL	DC/NGO		
<b>Implementation Stage</b>																							
12	Land Acquisition																			DC	DC		
13	Payment of Compensation																			NHIDCL	DC		
14	Relocate houses, shops, businesses																			DC	DC		
15	Grievance Redressing																			DC	NGO		
16	Consultations with PAPs																			DC	NGO		
17	Clear the ROW																			DC	DC		
18	Income Restoration																			NHIDCL	NGO		
19	Issue notice for start of civil works																			NHIDCL	DC		
20	Civil works																			NHIDCL	Contractor		
<b>Monitoring Stage</b>																							
21	Management Information System																			NHIDCL	NGO		
22	Internal Monitoring <sup>(*1)</sup>																			NHIDCL	NHIDCL local		
23	External Monitoring <sup>(*2)</sup>																			NHIDCL	NGO		

NHIDCL: National Highways and Infrastructure Development Corporation Limited, AECOM: DPR Consultant, ADC: Autonomous District Councils,  
DC: Deputy Commissioner and/or District Collector



(\*1) Internal monitoring will be carried out every month

(\*2) External monitoring will be carried out every 6 months

Source: JICA Study Team

## CHAPTER 10 Resettlement Budget

The cost estimation for land acquisition and resettlement includes the cost for affected lands, structures, trees, resettlement assistances and support cost for RAP implementation. In this survey, the budget estimation is only limited to those covered in the census survey which is around 70% of the total land plot numbers. Thus, the budget shall be revised at the time of land acquisition. Tentative budget calculated in this survey comes out to be **Rs. 57 crores, 31 Lakhs and 82 thousands.**

The budget will be secured by MORTH from the national budget based on an application from NHIDCL. The budget will be transferred from MORTH to DC through NHIDCL, and disbursed to entitled households.

**Table 10-1: R&R Budget**

Item	Unit	Unit Cost (Rs. In Lakh)	Quantity	Total (Rs. In Lakh)
<b>I. Compensation</b>				
Land (Rural)*	Acre	7.73	95.13	735.15
Land (Urban)*	Acre	36.06	42.30	1,525.63
Structure (Permanent)	Sq. m	0.15	1296	194.40
Structure (Semi Permanent)	Sq. m	0.1	3024	302.40
Structure (Temporary)	Sq. m	0.05	4100	205.00
Public / Govt. building	No.	Lump sum	1	12.00
Trees (Fruit)	No.	0.15	1897	284.55
Trees (Other)	No.	0.1	662	66.20
Crops		Lump sum		22.00
Boat		25	20	500.00
<b>Sub-Total (I)</b>				<b>3,847.34</b>
<b>II. Allowance</b>				
Resettlement allowance	Household	0.5	761	380.50
Shifting assistance	Household	0.5	127	63.50
Subsistence allowance	Household	0.36	761	273.96
Assistance for livelihood loss	Household	0.25	761	190.25
Assistance for agriculture labours	Household	0.5	95	47.50
Assistance to vulnerable HH	Household	0.25	468	118.50
Training fee	Household	0.2	1256	251.20
<b>Sub-Total (II)</b>				<b>1,325.41</b>
<b>III. Implementation</b>				
NGO fees	Per year	3	5 years	15.00
Staff training	Lump sum			3.00
Information disclosure / GRM	Lump sum	2	5 years	10.00
Livelihood restoration	Lump sum			10.00
<b>Sub-Total (III)</b>				<b>38.00</b>
<b>Sub-Total (I+II+III)</b>				<b>5,210.75</b>
Contingency (10%)				521.07
<b>Total</b>				<b>5,731.82</b>

Note: Villages in Char lands are considered “Rural”, and villages elsewhere are considered “Urban”.

Note: The details of the recipients of the allowances and assistances under the items of “II.Allowance” are as follows.

- Resettlement allowance: All PAHs
- Shifting allowance: Displaced family
- Subsistence allowance: All PAHs
- Assistance for loss of livelihoods: All PAHs
- Assistance to vulnerable HH: PAHs with vulnerable people
- Training fees: All PAHs

Source: JICA Study Team

## CHAPTER 11 Monitoring and Evaluation

Monitoring is a periodic assessment of planned activities providing midway inputs, and gives necessary feedback of activities and the directions on which they are going. Whereas evaluation is a summing up activity at the end of the project, assessing whether the activities actually achieved their intended goals and purposes or not. The Project will adopt a two-tier monitoring system; internal monitoring and external monitoring and evaluation.

### 11.1 Internal Monitoring

Internal monitoring will be carried out by the NHIDCL field office with the assistance from a RAP Implementation NGO. RAP implementation agency will submit monthly report to the NHIDCL field office. The NHIDCL field office will review and assess the progress and results of RAP implementation by visiting the project site, preferably biannually, to monitor the current status and adjust the work program where necessary, in case of delays or any implementation problems as identified.

The objectives of internal monitoring are as follows.

- (i) To measure progress against the RAP implementation plan.
- (ii) To confirm if all entitlements agreed upon are delivered to PAPs.
- (iii) To identify critical issues that impedes the project or people, and suggests measures.
- (iv) To monitor the efficiency of the GRM.
- (v) To appraise the satisfaction of PAPs with the activities of the project.

The design of the Monitoring Form is shown below:

**Table 11-1: Internal Monitoring Form**

Major items of action	Specific action steps (sub-items)	Progress in quantity	Progress in %	Expected Date of Completion
Recruitment, training and deployment	Deployment of consultants and resettlement workers (MM)			
	Training and mobilization (No. of trained personnel)			
Review of Resettlement Action Plan	Review of RAP (%)			
	Finalization of PAPs (%)			
	Approval of RP with corrections (%)			
Socio-economic Survey	Field Survey, data collection, data analysis (%)			
	Valuation of affected property and collection of data (%)			
	Produce data for comparison/evaluation (%)			
Information campaign	Distribute information brochure (No. distributed)			
	Public consultation meetings/FGD (Times)			
Identification of PAPs	Assigning ID numbers (No. of Person)			
Payment	Opening bank account (No. of Person)			
	Assist PAPs to collect cash compensation (No. of Person)			

	Confirm payment transfers (No. of Person)			
Resettlement	Coordinate resettlement site with DC (No. of HH)			
	Assist relocation and resettlement (No. of HH)			
Income restoration program	Training program, Assistant activities (No. of case)			
	Field Survey, data collection, data comparison (%)			
Grievance Redress	Formation of GRC (%)			
	Receiving complaints / claims from PAPs (No. of case)			
	Resolved complaints / claims from PAPs (No. of case)			
Supervision and Management	Supply of manpower (MM)			
	Number of meetings with relevant agencies (No. of meetings)			
Reporting	Inception / Monthly progress / Draft final report			

Source: JICA Study Team

## 11.2 External Monitoring

External monitoring of RAP will be undertaken by the independent agency, a third party, to assess the implementation of resettlement, assistances and their impacts, and suggest any adjustments of delivery mechanisms and procedures as required. A post-resettlement evaluation will be carried out to confirm the effectiveness of the resettlement and assistance programmes in comparison with the baseline data.

The fundamental objectives of external monitoring are as follows.

- (i) To monitor the overall compliance of RAP in the project
- (ii) To monitor delivery of entitlement according to RAP
- (iii) To assess the resettlement outcomes in comparison with the baseline conditions
- (iv) To assess whether the livelihoods and living standards have been restored

**Table 11-2: External Monitoring Form**

Major Items in Actions	Details (Sub-items)	Answer	Remark
Review RAP	• Is the content of the RAP efficient and entitlements sufficient?	Yes/No	
	• Is the time frame and budget sufficient to meet objectives?	Yes/No	
Monitor operational process	• Has the census and asset verification/quantification procedures been implemented?	Yes/No	
	• Is the timing and duration of the hearing objections procedures adequate?	Yes/No	
	• Is the coordination between NGO, NHIDCL, and other line agencies effective in addressing the issues identified?	Yes/No	
Stakeholder consultation and participation	• Implementation of information dissemination and its adequacy	No. of cases	
	• Consultations and meetings with community, PAPs, vulnerable people, women, etc. are implemented.	No. of cases	
	• Number of GRC conducted, and participation of appropriate stakeholders including government officials,	No. of cases	

	NHIDCL, PAPs.		
	<ul style="list-style-type: none"> <li>Types of complaints/grievances raised and resolved and time taken for the resolution of complaints/grievances</li> </ul>	Describe	
Land and asset acquisition	<ul style="list-style-type: none"> <li>Agreement and consent received before the acquisition and change of official registration after the acquisition.</li> </ul>	Progress	
	<ul style="list-style-type: none"> <li>Land acquired (private and government owned land, land use by agricultural, residential, commercial etc.);</li> </ul>	Progress	
	<ul style="list-style-type: none"> <li>Structures acquired (private buildings, government buildings and infrastructure etc.);</li> </ul>	Progress	
	<ul style="list-style-type: none"> <li>Trees and crops acquired</li> </ul>	Progress	
Delivery of entitlements	<ul style="list-style-type: none"> <li>Payment of compensation and assistance including the timing.</li> </ul>	Progress	
	<ul style="list-style-type: none"> <li>Has the resettlement sites adequately prepared, when required?</li> </ul>	Yes/No	
	<ul style="list-style-type: none"> <li>Has the compensation paid for temporary impact and has the site restored after construction?</li> </ul>	Yes/No	
	<ul style="list-style-type: none"> <li>Level of satisfaction</li> </ul>	Positive %	
Restoration of livelihoods	<ul style="list-style-type: none"> <li>Has the employment been provided to compensate the loss of earnings?</li> </ul>	Yes/No	
	<ul style="list-style-type: none"> <li>Has job trainings and other assistance programs been provided and are they adequate to restore livelihoods?</li> </ul>	Yes/No	
	<ul style="list-style-type: none"> <li>Monetary and technical assistances sufficient for livelihood restoration</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>Level of satisfaction</li> </ul>	Positive %	
Economic activities of PAPs	<ul style="list-style-type: none"> <li>Employment status</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>Change in occupation and stability of income source</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>Change in income of households</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>Change in skill levels</li> </ul>	Positive %	
Access to Infrastructure and networks	<ul style="list-style-type: none"> <li>Change in access to transport and mode of transportation</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>Change in access to markets</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>Change in access to health care, education facilities and other community facilities etc.</li> </ul>	Positive %	

Source: JICA Study Team

### 11.3 Stakeholder Consultation

Public consultations were arranged at the scoping phase and draft final report phase to ensure the participation of the community in the planning process, and to gather issues, comments and suggestions from the relevant stakeholders.

Consultation with the first stakeholder was held in two locations and followed by five community meetings and three focus group discussions, in order to cover project area and to have a comprehensive view on the project. Consultation with the second stakeholder was held in four locations where a majority of the PAPs have easy access.

Information for those who remained un-surveyed due to absence during the census survey period, information of stakeholder meeting and the summary of draft report, was shared by the land acquisition officers of respective districts and assistance from the village chiefs and neighboring residents. The same method will be employed for the information dissemination during the hearing objection period.

## ANNEX

### Annex 1: TOR for RAP Implementation Agency

#### 1. Project Background

Ministry of Road Transport and Highways (MORT&H) plans to construct Two / Four lane bridge including approaches over River Brahmaputra between Dhubri on North Bank via newly formed South Salmara-Mankachar district villages, and Phulbari on South Bank in the state of Assam/Meghalaya on NH-127B under JICA loan. The bridge will be constructed approximately 20 km to provide better connection in a long continuous stretch.

NHIDCL has prepared Resettlement Action Plan (RAP) in compliance with State Government, Government of India and JICA Guideline for Environmental and Social Consideration which is in line with World Bank's OP 4.12.

The NGO shall be responsible for assisting NHIDCL in facilitating land acquisition and Resettlement Plan (RP) implementation in an efficient and transparent manner.

The proposed bridge traverses along 18 villages in Dhubri, South Salmara-Mankachar, West Garo Hills Districts. According to census survey in RAP report, the details of impacted land and displacement have been provided below.

**Table 1: Summary of Impacts**

Sl. No.	Impacts	Number
1	Total Area of Land required (in Hectares)	94.3
2	Area of private land to be acquired (in Hectares)	56.2
3	Total number of PAHs	761
4	Total number of PAPs	3,043
5	Total number of private structures affected	273
6	Total number of physically displaced households	127
7	Total number of physically displaced persons	500

#### 2. Scope of Work

##### 2.0 Coordination with Appropriate Government Agencies

Land acquisition and resettlement shall be implemented in close coordination and cooperation with respective government agencies as listed below. Current status of land acquisition process shall be confirmed prior to the Work.

- Dhubri District Collector and Land Acquisition Officer
- South Salmara-Mankachar District Collector and Land Acquisition Officer
- West Garo Hills District Collector (for Phulbari)

##### 2.1 Update the Census Survey

- Confirm the validity of the information on affected and eligible families including loss of assets and loss of livelihoods (agricultural labours, boat operators, etc.) from the Project. Special attention shall be paid to land ownership in the project area as it is often divided into several families who do not appear on the government records and families who live on the government land without legal documents. Those who are not covered in the census survey shall also be surveyed.

- Based on the above, prepare the list of eligible PAPs and their entitlement and benefits as per the entitlement framework (as described in the RAP).

## **2.2 Assistance on Land Acquisition**

- Inform PIU about the shifting dates agreed with the PAPs in consultation with the PAPs.
- Assist the PAPs in opening bank accounts explaining the implications, the rules, and the obligations of a bank account and how they can access the resources they are entitled to.
- Assistance in Payment of Resettlement Benefits to PAPs in coordination with district administrators.
- Prepare Public Information Booklet<sup>9</sup> and circulate among PAPs and affected communities and provide information to PAPs about the respective entitlements as proposed under the RAP, and distribute entitlement cum ID Cards to the eligible PAPs.

## **2.3 Facilitate the Grievance Redress Mechanism**

- Nominate a suitable person from the staff of the NGO<sup>9</sup> to be a member of the Grievance Redress Committees (GRCs) at both local as well as district level.
- Inform PAPs about the function of GRMs/GRCs and how they can utilize the mechanism.
- Record the grievance and bring it to the notice of the GRCs in a timely manner. Assist PAPs to express their grievance in GRC and inform decisions taken by the GRC.
- In addition to receiving grievance, carry out periodic consultation with PAPs.

## **2.4 Assist PAPs for the Rehabilitation**

- Survey alternative method of livelihood using local resources and opportunities<sup>10</sup> available in the project area as well as outside. Consult with the PAPs in finding suitable economic rehabilitation options.
- Carry out exercise of skill mapping<sup>11</sup> and training needs assessment before finalization of training schemes and coordinate with the project, training institutions and non-government training agencies.
- Develop good rapport with the local financial institutions and facilitate access to credit at acceptable terms and conditions.
- Liaise with PIU / Contractor for construction related activities and design training program
- Establish linkage with the district administration for ensuring that the PAPs get access to government poverty reduction programs.
- Disseminate information to the PAPs on the possible economic opportunities available with the project.

## **2.5 Social Responsibility**

- Conduct awareness program for HIV/AIDs, health and hygiene, and human trafficking in affected villages.
- Assist PIU to ensure that the contractors are abiding by the applicable laws, concerning issues such as: child labour, discrimination in employment and occupation, minimum wages equal to male and female worker, health and safety measures as per contract.

## **2.5 Monitoring and Evaluation**

<sup>9</sup> Local trusted NGO who can represent the opinions of the local people.

<sup>10</sup> It may include agriculture/fishery products marketing, transportation services, trading goods, starting shops, etc.

<sup>11</sup> The process of identifying and understanding the specific knowledge and abilities which may differ according to the region, sex and vulnerability



- Collect data required on monitoring of RAP implementation and selected impact indicators on monthly basis.

## 2.6 Reporting

- Monthly progress reports to be submitted to at the end of each month. Shall include weekly progress and work charts as against the scheduled timeframe of RAP implementation.
- Completion Report at the end of the contract period summarizing the actions taken during the project, the methods, and personnel used to carry out the assignment, and a summary of support/assistance given to the PAPs.

## 3. Staffing requirement

The table below details the required staffing structure and qualification of experts for the assignment.

**Table 2: Qualification of Staffs (RAP Implementation NGO)**

Staff	Qualification
Team Leader	Minimum: Post graduate degree in social science, Sociology, Economics, Master in Social Work, Masters in Rural Development, Bachelors of law shall be added qualification 10 years of minimum professional experience 10 years of minimum relevant experience in implementing R&R activities. Previous experience in project funded by external donors. Good understanding of land acquisition process and LARR 2013
Social Development Expert	Minimum: Bachelor's degree in social science, Post graduate degree in social science is preferred 10 years of minimum professional experience 10 years of minimum relevant experience in community development and community awareness projects.
Field Coordinator	Minimum: Bachelor's degree in any discipline, Post graduate degree in social science is preferred 10 years of minimum professional experience 5 years of minimum relevant experience in R&R activities. Previous experience in project funded by external donors strongly preferred. Good understanding of land acquisition process and LARR, 2013. Proficient in local language is preferred.
Field Support Staff	Minimum: Bachelor's degree in any discipline. Post graduate degree in social science is added qualification 3 years of minimum professional experience Previous experience in working rural communities required. Proficiency in local language is required. Previous experience in land acquisition activities and working in the region is strongly preferred.

(Source: Study Team)

Sample monitoring form is as shown below.

**Table 3: Monitoring Form (RAP Implementation NGO)**

Major items of action	Specific action steps (sub-items)	Progress in quantity	Progress in %	Expected Date of Completion
-----------------------	-----------------------------------	----------------------	---------------	-----------------------------

Recruitment, training and deployment	Deployment of consultants and resettlement workers (MM)			
	Training and mobilization (No. of trained personnel)			
Review of Resettlement Action Plan	Review of RAP (%)			
	Finalization of PAPs (%)			
	Approval of RP with corrections (%)			
Socio-economic Survey	Field Survey, data collection, data analysis (%)			
	Valuation of affected property and collection of data (%)			
	Produce data for comparison/evaluation (%)			
Information campaign	Distribute information brochure (No. distributed)			
	Public consultation meetings/FGD (Times)			
Identification of PAPs	Assigning ID numbers (No. of Person)			
Payment	Opening bank account (No. of Person)			
	Assist PAPs to collect cash compensation (No. of Person)			
	Confirm payment transfers (No. of Person)			
Resettlement	Coordinate resettlement site with DC (No. of HH)			
	Assist relocation and resettlement (No. of HH)			
Income restoration program	Training program, Assistant activities (No. of case)			
	Field Survey, data collection, data comparison (%)			
Grievance Redress	Formation of GRC (%)			
	Receiving complaints / claims from PAPs (No. of case)			
	Resolved complaints / claims from PAPs (No. of case)			
Supervision and Management	Supply of manpower (MM)			
	Number of meetings with relevant agencies (No. of meetings)			
Reporting	Inception / Monthly progress / Draft final report			

## Annex 2: TOR for External Monitoring Agency

### 1. Project Background

Ministry of Road Transport and Highways (MORT&H) plans to construct Two / Four lane bridge including approaches over River Brahmaputra between Dhubri on North Bank via newly formed South Salmara-Mankachar district villages, and Phulbari on South Bank in the state of Assam/Meghalaya on NH-127B under JICA loan. The bridge will be constructed approximately 20 km to provide better connection in a long continuous stretch.

NHIDCL has prepared Resettlement Action Plan (RAP) in compliance with State Government, Government of India and JICA Guideline for Environmental and Social Consideration which is in line with World Bank's OP 4.12.

The NGO shall be responsible for monitoring the process and evaluate the result of land acquisition and Resettlement Plan (RP) implementation in an efficient and transparent manner.

The proposed bridge traverses along 18 villages in Dhubri, South Salmara-Mankachar, West Garo Hills Districts. According to census survey in RAP report, the details of impacted land and displacement have been provided below.

**Table 4: Summary of Impacts**

Sl. No.	Impacts	Number
1	Total Area of Land required (in Hectares)	94.3
2	Area of private land to be acquired (in Hectares)	56.2
3	Total number of PAHs	761
4	Total number of PAPs	3,043
5	Total number of private structures affected	273
6	Total number of physically displaced households	127
7	Total number of physically displaced persons	500

### 2. Scope of Work

#### 2.1 Review RAP

- Review the content of RAP to confirm that the entitlements are sufficient.
- Review the time frame and verify the adequacy of budget to meet the objectives of the RAP.
- Based on the above, provide recommendation for policy changes if required.

#### 2.2 Monitoring of the Processes and Procedures

- Monitor the procedure and progress of the census and asset verification/quantification.
- Monitor the timing and duration of the hearing objections procedures.
- Monitor the effectiveness of the coordination between NGO, NHIDCL, and other line agencies in addressing the issues identified.
- Identify, quantify and qualify the types of conflicts and grievances reported and resolved and describe any outstanding actions that are required.
- Describe further mitigation measures needed to meet the needs of any PAPs if required.
- Review results of internal monitoring and verify claims through sampling check at the field level to assess whether land acquisition/resettlement objectives have been generally met.

## 2.2 Monitoring of Land Acquisition and Delivery of Entitlements

- Monitor that the agreement and consent were received before the acquisition and change of official registration after the acquisition.
- Monitor the quality, sufficiency of funds and on-time delivery of entitlements according to RAP.
- Monitor the payment of compensation and assistance including its levels and timing.
- Monitor the provision of employment, job trainings, other assistance programmes and their adequacy.
- Monitor that the equal opportunities are provided to women for the employment and no children are employed in construction work. Monitor the preparation and adequacy of resettlement sites, if it is required.
- Monitor the payment of compensation for temporary impact and restoration of site after the construction

## 2.3 Participation of PAPs in Monitoring and Evaluation

- During monitoring and evaluation activities, participation of all stakeholders shall be ensured, including the method described as follows;
- Community public meetings and Focused Group Discussions (FGD)
- Key informant interviews with select local leaders, village workers or persons with special knowledge or experience about resettlement activities and implementation.
- Informal surveys/interviews: informal surveys of PAPs, workers, resettlement staff, and implementing agency personnel using non-sampled methods.

## 2.5 Evaluation of Impacts after the Land Acquisition and Resettlement

- Establish by appropriate investigative and analytical techniques, the pre- and post- project socio-economic conditions of the PAPs.
- Approximately 20% census survey of persons who were severely affected by the project and have relocated either to group resettlement sites or preferred to self-relocate.
- Approximately 10% sample survey of persons who had property, assets, incomes and activities marginally affected by Project works and did not relocate.
- Approximately 10% sample survey of those affected by off-site project activities by contractors and subcontractors, including employment, use of land for contractor's camps, pollution, public health etc.
- **Monitoring items shall include the followings.**
  - Level of satisfaction from the livelihood restoration programme.
  - Change in economic activities (employment, occupation, income, skills, etc.)
  - Change in access to infrastructures (transport, markets, schools, hospitals, other social facilities, etc.)
  - Conflict within and among PAPs and non-PAPs due to unequal distribution of benefits and losses.

## 2.6 Reporting

- Biannual progress reports to be submitted including recommendation of actions if identified.
- Mid-term and final evaluation will be carried out to find out if the R&R objectives have been achieved as against the performance impact indicators.

## 3. Staffing requirement

The table below details the required staffing structure and qualification of experts for the assignment.

**Table 5: Qualification of Staffs (External Monitoring Agency)**

<b>Staff</b>	<b>Qualification</b>
Team Leader	Minimum: Post graduate degree in social science, Sociology, Economics, Master in Social Work, Masters in Rural Development shall be added qualification 10 years of minimum professional experience 10 years of minimum relevant experience in planning, implementation and monitoring of involuntary resettlement for infrastructure projects.
Livelihood Restoration Specialist	Minimum: Bachelor's degree in social science 10 years of minimum professional experience in social impact assessment including census and socioeconomic surveys, restoration of livelihood in compliance with safeguard policies of the international development agencies and national legislations. Experience of preparing/monitoring livelihood restoration program is essential.
Gender Specialist	Minimum: Bachelor's degree in social science 10 years of minimum professional experience 5 years of minimum relevant experience in social impact assessment including census and socioeconomic surveys, gender in compliance with safeguard policies of the international development agencies and national legislations. Experience of preparing/monitoring a gender program is essential.
Data Analyst	Minimum: Bachelor's degree in any discipline. 3 years of minimum professional experience. Working experience and knowledge of software, preferably relational, and data analysis are required.

(Source: Study Team)

Sample monitoring form is as shown below.

**Table 5: Monitoring Form (External Monitoring Agency)**

<b>Major Items in Actions</b>	<b>Details (Sub-items)</b>	<b>Answer</b>	<b>Remark</b>
Review RAP	• Is the content of the RAP efficient and entitlements sufficient?	Yes/No	
	• Is the time frame and budget sufficient to meet objectives	Yes/No	
Monitor operational process	• Has the census and asset verification/quantification procedures been implemented?	Yes/No	
	• Is the timing and duration during the hearing objections procedures adequate?	Yes/No	
	• Is the coordination between NGO, NHIDCL, and other line agencies effective in addressing the issues identified?	Yes/No	
Stakeholder consultation and participation	• Implementation of information dissemination and its adequacy	No. of cases	
	• Consultations and meetings with community, PAPs, vulnerable people, women, etc. are implemented.	No. of cases	
	• Number of GRC conducted, and participation of appropriate stakeholders including government officials, NHIDCL, PAPs.	No. of cases	

	<ul style="list-style-type: none"> <li>• Types of complaints/grievances raised and resolved and time taken for the resolution of complaints/grievances</li> </ul>	Describe	
Land and asset acquisition	<ul style="list-style-type: none"> <li>• Agreement and consent received before the acquisition and change of official registration after the acquisition.</li> </ul>	Progress	
	<ul style="list-style-type: none"> <li>• Land acquired (private and government owned land, land use by agricultural, residential, commercial etc.);</li> </ul>	Progress	
	<ul style="list-style-type: none"> <li>• Structures acquired (private buildings, government buildings and infrastructure etc.);</li> </ul>	Progress	
	<ul style="list-style-type: none"> <li>• Trees and crops acquired</li> </ul>	Progress	
Delivery of entitlements	<ul style="list-style-type: none"> <li>• Payment of compensation and assistance including the timing.</li> </ul>	Progress	
	<ul style="list-style-type: none"> <li>• Has the resettlement sites adequately prepared, when required?</li> </ul>	Yes/No	
	<ul style="list-style-type: none"> <li>• Has the compensation paid for temporary impact and has the site restored after construction?</li> </ul>	Yes/No	
	<ul style="list-style-type: none"> <li>• Level of satisfaction</li> </ul>	Positive %	
Restoration of livelihoods	<ul style="list-style-type: none"> <li>• Provision of employment to compensate loss of earnings</li> </ul>	Yes/No	
	<ul style="list-style-type: none"> <li>• Provision of job trainings and other assistance programs to restore livelihoods and their adequacy.</li> </ul>	Yes/No	
	<ul style="list-style-type: none"> <li>• Monetary and technical assistances sufficient for livelihood restoration</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>• Level of satisfaction</li> </ul>	Positive %	
Economic activities of PAPs	<ul style="list-style-type: none"> <li>• Employment status</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>• Change in occupation and stability of income source</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>• Change in income of households</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>• Change in skill levels</li> </ul>	Positive %	
Access to Infrastructure and networks	<ul style="list-style-type: none"> <li>• Change in access to transport and mode of transportation</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>• Change in access to markets</li> </ul>	Positive %	
	<ul style="list-style-type: none"> <li>• Change in access to health care, education facilities and other community facilities etc.</li> </ul>	Positive %	